Established 1848.

ST. LOUIS, MO., THURSDAY. JANUARY 4, 1900.

Volume LIII., No. 1.

GOLMAN'S RURAL WORLD

NORMAN J. COLMAN, Bditors.

In the concluding article on "Self-Help the Best Help," by Mr. G. H. Turner of Mississippl, which we publish in this is-sue, there are presented some facts from Mr. Turner's personal experience waich should stir the thought. Mr. Turner does should stir the thought. Mr. Turner does not arrogate to himself superior ability, but plainly intimates that others can du as well as he has done, if they will. Aye, there's the rub. Will we do as well as we can? Is not our knowledge of the right greater than our inclination to 60 the right? Our Pettis Co., Mo., correspondent, W. D. Wede, presents a picture in this D. Wade, presents a picture in this ue which illustrates the fact.

In these first days of the year of Our Lord 1990 let us ask of ourselves those per-tinent questions put by Mr. Turner and determine that at the close of this year of grace the answers shall be more cred-tiable to ourselves than they have been in the past.

The ice harvest is in full biast. The continued freezing weather for the past ten days has given ice ten to fifteen inches thick. Those having ice houses are filling them with the best ice they have had for many years. Use plenty of straw to cover, and around the outside of the inside of ice houses. Shield from the air as much as possible. With plenty of straw to cover and protect from the air fee may be kept in outhouses or in stalls and the protect from the air fee may be kept in outhouses or in stalls and a greater measure of success is insured.

Farmers are disposed to ignore the value of the significance of this factor as related to farm interests. But how can one wisely and intelligently make many of the purchases of articles required in farming operations without this knowledge. If pure-blooded stock of any specific provided in the first of the first of the significance of this factor as related to farm interests. But how can one wisely and intelligently make many of the purchases of articles required in farming operations without this knowledge. If pure-blooded stock of any specific provided in the first of the first of the purchase of articles required in farming operations without this knowledge. If pure-blooded stock of any specific provided in the first of the first of the purchase of articles required in farming operations without this knowledge. If pure-blooded stock of any specific provided in the first of the purchase of articles required in farming operations without this knowledge.

ST. LOUIS, MO., THURSDAY. JANUARY 4, 1900.

ST. LOUIS, MO., THURSDAY, MO., THU

straw to cover and protect from the air clair breed is needed, a farmer can not be generally in outhouse or in stalls as fully informed regarding the breeders in stables far into the summer. Ice is of the cattle from whom he is intending such a luxury that every farmer should save it. Ponds can be had on every farme and farmers can make their own ice houses if they have the will to make them. Farmers' wives need ice in summer and enterprising farmers will see that they have it.

back; if extremely cold put on more. Keep trenches open so the water will drain off. I intend to clear off some hilly timber land for bluegrass pasture. I will cut small stuff at the ground; larger, knee high and waist high, to save chopping. A stump cut high does not aprout as badly as when cut log, and is not in the way. I will burn the leaves off clean, then take a double shovel plow and one horse and scratch up, what dirt I can and sow the seed. I will keep stock off until the grass gets a good start. Will some one please tell me through the columns of the RU-RAL WORLD whether my idea is good or not, and when to sow and whether advis-

The part of the state of the st

The Cowy Odor



easiest cleaned, and requires less re-airs than any small separator made. Bend for Catalog No. 11.

The Sharples Co., P. M. SHARPLES, Canal & Washington Sts. West Chester, Pa. CHICAGO. U.S. A.

CLEAN, WHOLESOME MILK



uses a paper cap that is renewed every time is renewed every time the jar is filled.

THATCHER MFG. CO., Potsdam, N. Y.



CREAM SEPARATOR DAVIS CREAM SEPARATOR CO-88-90-92 W. Jackson St. CHICAGO

RODS AND DIP NEEDLES For locating Lost Treasures Gold and Silver. Circulars S stamp. Address, B. G. Stauffer Dopt. R. W., Harrisburg, Fa.





PEERLESS MILLS. . J. ADAM, JOLIET, ILL.

Must be first class if it is to operate Feedfutters, drinding dills, successfully. We mauricular Regimes 2, 4 & 6 horse power. Trend Powers for 1, 2, 3 horse, sweep of Lever Powers for 1 to 8 horse. Every maching fully warranted.













breeds must be used, and for dairy prec-poses one must stick to the dairy breeds. J. L. Erwin followed and said it was evidently intended that be should present his subject as a burlesque, for he was known as an advocate of the dairy. But

At the opening of the afternoon session the hall was filled with an enthusiastic and interested audience. J. W. Halstead, of Lawson, was the first

speaker. As would be inferred by his sub-ject, "Mistakes of an Amateur," Mr. Hal-stead is a beginner in the dairy business. stead is a beginner in the dairy business, but is making a success of it. Naturally, however, he is making some mistakes and frankly admits the fact. His address, which was without notes, awakened a lively discussion and called forth many questions, particularly so in connection with what was said concerning the growwith what was said concerning the grow-ing and feeding of Kaffir corn. Mr. Halis a strong advocate of this crop as a food for cows.

a food for cows.

After this address seven sweet singers sang a song. The singers were Messrs.
Shannon, Brady, Webster, Warren, Cornwell, Nash and Gerhardt, all from the city at the mouth of the Kaw. The song was highly appreciated by the audience and extensions was called for and given.

Notwithstanding the fact that the Kan-





Referring to Mr. Jas. Eldredge's statement regarding dairying on 60 acres, he said, don't over-reach. He had made more money in proportion from 30 to 40 cows than from 60 to 75.

Mr. C. W. Murtfeldt, in the discussion following, said some men can command only a company, some a battalion and some a regiment.

H. C. Goodrich, being called on, said he knew nothing of beef-raising, and had he was the same of the country that exceeded us in this respect.

press on must the used, and for dairy purposes on must take the the take the total take the total take the total as a buriseque, for the was an advocation to the was an ad

more money in proportion from 80 to 60 cows than from 80 to 75.

Mr. C. W. Murfeldt, in the discussion following, said some see can command following, said some see can command the same and about 1,000 cases of eggs.

H. C. Goodrich, being called on, said be law the same with the foreign of the conclusion that special on the conclusion that the conclusion

A JERSEY BULL used in Texas fever investigation at the Missouri Experiment Station, after three seasons infestation. See page four.

ance of all who were interested in the development of the dairy industry in the special care of his product. Set it away state. A call was then made for members at such temperature that it will be

judges in scoring butter, rate flavor at using special, commercial or pure culture 45 points out of a possible 100, and by so starters. These starters are made by

lowing paper on:

RIPENING CREAM.

In approaching the general subject of ripening cream, I wish to be understood by all, and will confine myself to plain ordinary language, and leave all words of a technical papers.

three inches of the top of the starter, and use the remainder in your cream. This system has many advantages, since by using the milk of a careful and cleanly dairyman, one is apt to have the same species of bacteria each day, and they are very apt to be of a desirable kind.

The education of the dairy cow bagan of a technical papers. and 19 new names were added to the roll.

Prof. E. W. Curtis, of the Kansas AgriWith a skimming dipper remove about another one was called for and given. ripening cream, I wish to be understood very apt to be of a desirable kind. 't Mr. J. E. Brady, of T. E. Brady & Co., by all, and will confine myself to plain must be admitted, however, that even Mr. J. E. Brady & Co., by all, and will confine myself to plain must be admitted, however, that even will be admitted.

Notwithstanding the fact that the Karsass Through Market is handling a very large proportion of the output of creamery butter of Kansas, there is a demand in that city for more of the best grades of creamery butter. In fact, Kansas City is rapidly coming to the front as a great butter market. The East, Weat and South look to it for supplies and in order to meet these demands its dealers are solely to produce flavor, the subject practically reduces itself to ways and means of producing high-flavored butter.

It may be well to study a moment the composition of cream, and in order that compast, quincy, Ill., have placed upon the markets a barner's Handy of and the line in the composition of cream, and in order that compast, quincy, Ill., have placed upon the markets a barner's Handy of and the line in the composition of cream, and in order that composition of cream and sold for only \$21.05.

Since we ripen cream species of bacter

ream.

In the item of solids not fat, we have to less degrees, usually, however, from 165 to consider the ripening of cream, for it is

100 degrees. This kills the growing or
this part of cream only that is affected by
ripening. The changes that take place in
the solids not fat are caused entirely by

The Dairy

which is so promined in much of the dairy butter, and which is so offensive to many people is the result of dirt; real fine dirt that can be a secretary has accelerated by health of the dirty, produces a perfect flavor and great-but test that can be in the subject of many people is the case with make measured by health of the dirty, produces a perfect flavor and great-but test that can be in the subject of the subject of many people is the case with plants of shighter order, which is so offensive to many people is the case with plants of shighter order, which is so offensive to many people is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order with a continued growing outside order to make of creams plants, and as is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is the case with plants of shighter order, which is case the case of the case with plants of shighter order, which is case that the case with plants of shighter order, which is case the case of the case with plants of shighter order, which is case of the case with plants of shighter order, which is case of the case with plants of shighter order, which is case of the case with plants of shighter order, which is case of the case with plants of shighter order, which is case of the case with plants of shighter order, which is case of the case of the case with plants of shighter order, which is case of the case with plants of shighter order, which is case of the case with plants of shighter order, which is the case of the case with twenty per cent starter should be used, and nearly the same amount when the cream is cut thick and heavy by the sep-arators so as to test forty to fifty per

gence.

The education of the dairy cow began long ages ago, I know not when, but it was when man first began to see the importance of the milk of the cow as a human food. Then began the process of education and development of the milk-giving function, and it has been continued to down the work how with the continuers, until the ing function, and it has been continued on down through the centuries, until the dairy cow of to-day is totally unlike the original, as seen in the wild cattle. So we see that the education of the dairy cow must needs begin with her remote ancestry. By wise and judicious handling, feeding and breeding, continued from generation to generation, she was educated and tion to generation, she was educated and established in those traits and characteristics which were desired. But to come down to the individual cow, her education down to the individual cow, her equication should begin at birth. She must, be so fed as to develop bone and muscle, and make good growth, but not so as to put on fat and thus establish a beef-making habit. Here is where we so often fail in raising dairy cows. We do so like to have nice fat calves, and these are the kind that take the eye of nearly every caller.

BROWN'S Bronchial

No **Trouble** With This Fence.

It is built to kill trouble, and does kill trouble wherever it is put up. Why not? It is made of large Spring Steel Wires. It is heavily galvanized. It provides for expansion Why not? It is made of large Spring Steel and contraction, All required of the fence user is to stretch it tight—then it stays up and is a fence for a lifetime. The

American Field and Hog Fences

are sold by agents everywhere, at the lowest price for which a perfect fence can be sold. If you fail to find our agent in your town, write to the manufacturers,

American Steel and Wire Co., NEW YORK, OHICAGO, SAN FRANCISCO

How often do visitors pick out the fattest,

In connection with the foregoing paper,
Prof. Curtis made a test of cream, using
the Farrington Tester. Following the
demonstration the scores on butter and
cheese entries were read, after which the
convention adjourned until 7:20 p. m.
NIGHT SESSION, TUESDAY, NOV. 28.
When the chairman called the house to
order for the closing session of the day,
the hall was crowded to its utmost limit
and many who came late were unable to
gain an entrance.

J. L. Erwin made a few minutes' talk
to the boys and girls present.

H. C. Goodrich, of Calhoun, presented
the following paper on
EDUCATING THE COW.
When your secretary asked me to prepare a paper on "Educating the Cow." It
at once struck me that he had hold of the
wrong end of the subject, rather that it is
the owner of the cow when needs educating, instead of the cow herself, and I confess that it seems a little that way to me
yet. However, there is considerable in
the education of even a cow, and her education is so closely linked with that of
her owner as to be well night inseparable.

If we are to educate the cow we must a few days she gained about eight pounds year. So it is best to watch our cows and try and get them dry if possible from four to eight weeks before calving.

A cow should be taught to expect kind treatment at all times. Let her know that you are her friend and will not abuse her, and she will usually respond by being docile and allowing you to milk her without any trouble. She should be accusproach her from the left side or handle be read and allowing you to be the proach her from the left side or handle be rin any way desired without being frightened. While I would emphasise the importance of being kind to the cow at all times and under all circumstances, I want to enter a protest against some of the stuff I read in our papers. A good cause is injured rather than helped by unreasonable statements. I have seen it the man's fault. That he is brutal and needs kicking. Now, I know I row from experience that some cows with the kindest of treatment will kick. I remember one helfer that we had that was a great pet and as greate as could be. When she came in milk flow, although gentie at first, she soon developed a habit of kicking. Now, do not tell me that she was she was always kindly used and milked his the usual manner. The only explanation that I can make is that for some reason the operation of being milked was unpleasant to her and she resented it. The only way that I know to treat such a cow if she gets so bad that one cannot milk her without, is to put a kicking strap on her. Fut a strap or rope around her just behind her hip bones. This will effect that we had that was a greate as could be. When she came in milk flow, although gentie at first, she soon developed a habit of kicking. Now, do not tell me that she was she was always kindly used and milked him that a lan make the sent of the stuff of the sum man and the resented it. The only explanation that I can make is that for some reason the operation of being milked was unpleasant to her and the reason the commotion of the sum of the proper proposition that

ADVANCE FENCE

ADVANCE FENCE COMPANY, FENCE! MADE. Bull



counds all right, but the open field had better have Page Fence around it, with one or two Page States. PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH. UNITARIAN LITERATURE Sent To all who may apply. Mrs. JOHN ORA WFORD 314 Alliston St., Cambridgeport, Mass.

THE CHAMPION -ONE-MAN SAW-Has a record of one cord per hour. No Backache. No Wet, Cold Kness. Fun to



EASILY EARNED BY LADIES, GINLS

R No. 68—Gares Whooping Cough in Sweeks. Frice by mail 75 cents per bottle. Address. ATLANTA MEDICINE CO., ATLANTA MEDICINE CO.,



If SE

W

For Test ling ALI Writ dise from Rooting, chin

10 crop can grow with-

Potash. Every blade of Grass, every grain of Corn, all Fruits and Vegetables must have it. enough is supplied

you can count on a full cropif too little, the growth will be



Best Northern Grown Seeds,
DIRECT FROM GROWER TO PLANTER,
from Sagfmaw Valley Seed Gardens. Seed Potetatoes, Vegetable, Flower, Field Seeds and Plants.



Berry Boxes @ \$2.50 \$9 1000.



TREES & PLANTS

We offer a large and fine stock of every descrip-Fruit and Ornamental Trees. Shrubs, Roses, Vines, Smal Fruits, Hedge Plants, Green-

house and Bedding Plants. PHOENIX NURSERY COMPANY, 150 N. Park St., Bloomington, Ill.





Horticulture.

HORTICULTURAL TALKS.

Late Planting.-Dec. 19, I planted \$6

inside the meat is turned shell, full of excellent meat. I wish I had a tree like it on my grounds, if it bears well. A few of the nuts will be planted, although it is not likely that I will ever see the trees bear, even if the nuts grow. The Nusbaumer, that was described in the RU. The teachers as well as the general public "are coming to know that schools a tree 15 feet high and six inches in diamate in the real section of the coming to know that schools should have an intimate relation to the home," and to admit the value there is iside the meat is divided more like a lokory nut; thin, hard shell, full of ex-

ut ten seeds, however. If any only about cen seeds, however. It any choose to add a stamp to pay for the put-ting up I'll not kick about it. I men-tion a dead tree, because the vine I had on a dead tree matured its fruit, while the one on a Keiffer pear did not. The Keiffer showed no fruit or the vine would the one on a case.

Keiffer showed no fruit or the vine would not have been allowed to run on it. That there is any great value in this thing is not for me to say, but that it is an interesting noveity anyone will admit. Its native place is Madagascar Island, I have been told. All who wish seeds must apply before Feb. 1, 1990, as after that time I will not have time to attend to them.

I will not have time to attend to them.

To obtain best results it is necessary to will not have time to attend to them. Bluffton, Mo. SAMUEL MILLER.

A MACEDONIAN CRY.

Calling for More Practical Means of Dis-seminating Knowledge of Plants.

Editor RURAL WORLD: The rich man n torment applying for a messenger to be ent to his kinsman was told "They have Moses and the prophets," etc. Arguing seminating elementary botanical, hor ultural and forestry knowledge amon e rising generation of our land—a sub the so frequently discussed on progrewe have a Botanical Garden, let ple go there for what information they ey are devoid of any knowledge whatver of botany and floriculture? The coments of a garden suited to the practical instruction of the pupils of a town or city must be selected and associated from a different point of view from that in vogue in the maintenance of a botanical

structive plants and civilizing grace of out-

ment and artistic culture of the masses of the people. EX-ATTACHE. Our good friend who makes the forego-ing fervent appeal for a cause which we

schools should have an intimate relation to the home. The influence of the school should be felt in the home in a specific way. There is every reason why its influence should be seen in the appearance of the grounds about the home. This will be done when geography study is made to include the observation of plants. Instruction that will give a knowledge of struction that will give a knowledge of the principles of plant growth, plans for beautifying homes by utilizing even small plats of ground so as to make them beautiful as well as contributors to the support of the family, is of more value than learning where Timbuctoo is. Our schools must train boys for something be-sides law, medicine, or teaching. The world needs men who shall invent and discover in the realm of the mechanical arts and chemistry those things which

er, but has never borne any nuts. That home," and to admit the value there is ne pecan and hickory will cross is not at in nature study. May the time quickly on nature study. May the time quickly come when teachers in our public schools will be expected to feed the children's minds directly from the great store house of nature. To that end why should there not be a school garden attached to every country school?

THE WILDER GRAPE. Editor RURAL WORLD: In the RUfeel it my duty to say a word in its favor. I consider the Wilder the most satisfac bears a nice little tory black grape in cultivation, all varie being exceptionally vigorous in growth, the mistake of pruning too long and ex-pecting a vine to mature too many of its immense bunches is commonly made, and when thus improperly grown the weak-ness of foliage shown in said engraving

practiced more or less with all fruits, but

practiced more or less with all fruits, but especially with the grape. Another thing that should be considered is that a variety can not be fairly tested by a single vine, plant or tree, as the case may be. With grapes I consider that a half dosen vines are necessary to secure a fair test. For example: Suppose that the Concord was a new variety, and we were to judge it by numerous appelment vines. judge it by numerous specimen vines to be found in many a Concord vineyard; we be found in many a Con getting the new varieties, as I am getting the new varieties, as I am in the habit of doing, it is no uncommon occur-rence to get vines that are small and weak, much inferior to those of my own propagation. EDWIN H. RIEHL. Alton, Ill.

MR. A. TUTTLE reports to the Boon-ville, Mo., "Democrat" that his prospects for a large crop of berries and apples for 2,000 young apple trees in fine bearing

LEAF CRUMPLER.

Editor RURAL WORLD: I herewith Will you please explain what it is give a remedy providing damage to

Jefferson Co., Ill.

Answered by Prof. H. C. Irish: The inclosed specimens were larves care. appears late in summer, making abou one-third of its growth before winter During this time the case is constructed During this time the case is constructed and surrounded with a mass of dried and crumpled leaves in which the larva remains in a torpid state until plant growth begins in spring. With the unfolding of the leaves the worm returnes its activity and begins eating the young leaves. It completes its growth in June, changes completes its growth in June, changes to a chrysalis, and about two weeks afterwards becomes a moth which deposits its eggs, in July and later the larvae haten, which completes the life cycle. This insect is known to work upon the apple, quince, cherry, plum and peach, but has rarely occurred in very large numbers. When abundant, however, it rapidly depended to the research of their leaves at least nudes the trees of their leaves. At least two species of parasites feed upon the larvae and the latter is doubtless thus kept in check to a great extent. The only way of destroying the larvae is to gather the cases during the winter and burn

them.

Concerning the leaves on the trees at this season of the year it is probable that active growth continued too long. Late cultivation will produce late growth or prevent proper ripening of wood, but as that was not given in this case there must have been seme other cause. Abund. must have been some other cause. Abundant rain during autumn will produce the To get queen cells started, the up-to-c same effect especially if there was a dry summer. H. C. IRISH,

INFORMATION WANTED

able for this section; also strawberries, able for this section; also strawberries, reapherries, currants and gooseberries, peaches, peaches, pears and plums, and if possible prices of the same. I want part of the apples to be early bearers and planted between the others and the early ones cut out when the others need more room. For want of space I will have to plant as closely as possible. The sell is very For want of space I will have to plant as closely as possible. The soil is very good and the land mostly level. It has been cultivated in corn the last two or three years. Will it do to plant peaches between the apple tree rows when the latter are about 25 or 30 feet apart? I have read that the peaches did very well but that the apple trees were much injured. I would be stad to have possitive informed.

would be glad to have positive information regarding this.

What kind of peaches, beside the Elberta would you recommend for good, extra early; and what for medium and late for a small family orchard? Do you know anything of Stark's Summer Snow or their Gold plum or Apple of Commerce of Black Ben Davis? Would you recommend Wolf River, Jeffries Stayman's Winesap or Gano in preference to dit. Sorts, or to Ben Davis? Would you advise planting the Koonce and Krull varieties of pears? Is it your honest opinion that whole root trees are worth more ion that whole root trees are worth more in the present the bees did not restrain her.

When the queen cells are all started and ready to seal over, the bees then warm, leaving a young queen to hatch in the dould not the predate to raise queens nature.

When the queen cells are all started and ready to seal over, the bees then warm, leaving a young queen to hatch in the dould not restrain her. from Stark Bros. the fall of '9s. The Apple of Commerce, Wolf River and Jef-fries winter killed badly. The Black Ben Davis, Duchess and Yellow Triumph did much better. I also lost a good many

ine, into the barren school and college grounds met everywhere, has been kindly chosen by the director of the Missouri Botanical Garden as a fit subject of discussion at the annual reunion of horticulturists and learned professors around the festive board spread by the liberality of the late Henry Shaw. This subject has been discussed and toasted at the control of the late Henry Shaw. This subject has been discussed and toasted at the control of the late Henry Shaw. This subject has been discussed and toasted at the control of the late Henry Shaw. This subject has been discussed and toasted at the control of the late Henry Shaw. This subject has been discussed and toasted at the control of the late Henry Shaw. The subject has been discussed and toasted at the control of the late Henry Shaw. The subject has been discussed and toasted at the control of the late Henry Shaw. The subject has been discussed and toasted at the control of the late Henry Shaw. The subject has been discussed and toasted at the control of the late Henry Shaw. The subject has been discussed and toasted at the control of the late Henry Shaw. The subject has been discussed and toasted at the control of the late Henry Shaw. This subject has been discussed and toasted at the control of the late Henry Shaw. The subject has been discussed and toasted at the control of the late Henry Shaw. The subject has been discussed and toasted at the control of the late Henry Shaw. The control of the late Henry Shaw are control of the late Henry Shaw and the late of the control of the late of the control of

The Apiary.

ILLINOIS BEE-KEEPERS.

Springfield, Ill., December 27 .- The Iili-State Bee-Keepers' closed its annual convention to-day, elect their leaves sooner. The orchard is two years old and cultivated in corn. The trees were hoed. The orchard was cultivated the last time in July. The trees have made a splendid growth and look very thrifty.

A. T. MAXEY



THE QUEEN BEE.

how many of the readers of the RURAI WORLD ever saw a queen bee. Having

produced. They are produced naturally only in the early summer when prepara twelve queen cells, but seldom

queen breeder makes queen cups or cells and places them on a slat along in a row, after first depriving some colony of their queen, thus inducing them to start a number of queen cells of their own, i order to obtain the food which the b Regarding What to Plant and How to Plant.

Editor RURAL WORLD: I want to plant a small orchard in the spring and would like to have a list of varieties suitable for this section; also strawberries. breeding queen into these prepared cell These prepared cells are then given queenless colony to build out and ge ready to hatch. They may be given to colony that has a queen, provided the old queen is confined in the lower broo chamber, by placing a queen-excludin and the upper chamber.

This queen-excluding sinc has This queen-excluding sine has holes or slots cut in it just large enough to allow the worker bees to pass through, but too small to permit the queen to pass through, she being larger than a worker bee. If the queen had access to the cells she would tear them all down and destroy them. She would do this when the bees undertake to raise queens naturally in

colony. These hatch into larvae in three days and are then fed until they are

The Singer No. 15.



DOUBLE LOCK-STITCH. OSCILLATING SHUTTLE.

A sewing-machine specially adapted for high-speed operation, producing greatest quantity of fine stitching, and requiring least effort by operator. Has unusually large bobbe for lower thread and finest adjustment to all mechanical movements. Greatest range of work and lightest running lock-stitch sewing achine in the world.
Every genuine machine aries the trade-mark.

You can try one Free. Carachines taken in exchange SINGER SEWING-MACHINES ARE . AND SOLD ONLY BY

THE SINGER MANUFACTURING CO.

OFFICES IN EVERY CITY IN THE WORLD. PULVERIZING HARROW iron—lasta always. Light draft; cheapest Biling Harrow made. Best Paiveriser on earth. Shes 3 to 15/5 ft.

SERT ON TRIAL to be recurred at my expenself notentiarly attactions and best paid of the property o

THE STORRS & HARRISON CO., Box \$66 , PAINESVILLE, OHIO. FRUIT AND ORNAMENTAL TREES, SHRUBS, ROSES, BULBS, ETC.

Burpee's Farm Annual 1900

W. ATLEE BURPEE & CO., GROWERS, Philadelphia, Pa.



We PAY FREIGHT

THE ALBERT DICKINSON CO.

GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS, PEAS, POP CORN, SIND SEEDS, BUCKWHEAT, BAGS, ETC.
OFFICES, WEST TAYLOR ST., AND THE RIVER, CHICAGO.

A NEW FERTILIZER—A TRUE CROP PRODUCER We have a natural crop producer with quick action and satisfactory results. Try G on you ops. A simple, natural tertilizer, takes up quickly by the soil and making learne returns, sea writing mention "Baral World." Address, ST. LOUIS SARITABY CO., St. Louis, Mo

this particular edition. Some of the new topics treated are Apis Dorsata, Bees and Grapes, Hives, Honey, Honey on Com-mission, Honey as a Food, Honey Pedmission, Honey as a Food, Honey Fed-dling, Willow Herb and Weight of Bees. Many of these subjects have been given special attention in this new book. Bee keepers needing a manual will find this work a most valuable one as no pains have been spared to make it one of the fullest and, roost up-in-date bee books. Price, in cloth, 475 pages, gotten up cyclopedic form, postpaid, \$1.20; by freight or express with other goods, \$1.90. The A. I. Root Company, Medina, Ohio.

colony. These hatch into larvae in three Davis, Duchess and Yellow Triumph did much better. I also lost a good many peaches, pears and plums but last winter was unusually cold (\$\frac{\pi}{2}\$ degrees below zero) for this section. I am thinking of planting Missouri Pippin. Duchess of Oldenburgh. Yellow Transparent and Wealthy between rows of others for early bearers. Can you recommend anything better?

Alexander Co., II.

Edwin H. Riehl answered the foregoing questions as follows: For the benefit of L. A. D'Lashmutt and other interested readers I submit the following varieties of sitswherries giving the best general satisfaction: Ruby, Clyde and Splendid; raspberries (red.), Miller and Loudon, (black capp). Tyler, Kansas and Eureks; Currants, North Star, Wilder and Fay. For a succession of the best peaches, plant Sneed, Alton, Elberta, Washington, wasted to the hive to go out no determined the red of the propersion of the best peaches, plant Sneed, Alton, Elberta, Washington, mated comes hack to the hive to go out no determined the form of the combs in the hive to combs in the hive to go out no mated to his hive to go out no mated to the hive to go out no mated to have the solution for the capp. Thous, Kanshag and Eureks; Currants, North Star, Wilder and Fay. For a succession of the best peaches, plant Sneed, Alton, Elberta, Washington, and the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no mated the combs in the hive to go out no determine the combs in the hive to go out no determine the combs in the hive to go

Treatment, Trees, Choice and Section of the International Control of the I

GET September 1 Se

FARMS.

A Fine Dairy Farm

FOR SALE, 80-AGRE FARM;
Three and one-half miles from Shaibina, Mo
Extra Good Land, Well Fenced. Suitings fairly
bearing orohard, small fruits, close to shoc
and church. One of the best farms in the count
ty. Price right; terms cary,
F. D. LUGE, Sheibina, Mo.

l of her ake cick but ceep that ding she

eowseding the with-response to the bosshelf-them more n put cows, y just

to dod thisng aso onedairyhaved how
r prodiffi-

d corn. grain. and as market ite for-lo., Ha-

COMING SALES.

Jan. 4.—T. R. Wilson, Morning Sun, Iowa. Foland-Chinas. Jan. 8.—Rainey Miller, Champaign, Ill. Sale at Taylorville. Foland-Chinas. Jan. 11.—J. S. Risk, Winn & Son and F. M. Lail. Bale at Springfield, Ill. Po-land-Chinas.

Charles Gulso, Chestnut, Ill. Poi-Chinas. 16.—I. G. Jones, Towanda, Ill. Po-Chinas. .-Ed Burroughs, El Paso, Ill. Po-

d-Chinas. ary 30.—A. G. Woodbury, Danville, Poland-Chinas. ary 31.—Burgess Bros., Bement, Ill. and-Chinas. 7.—E. H. Ware, Douglas, Ill. Po-22 and 23.—H. H. Harris and J. T. reland, of Marshall, Mo. Sale at

reland, or marshall, and bate at the Omahs. Galloway cattle.

5. 27, 28 and March I.—T. F. B. Som, W. S. Vanatta & Son and C. A. mard. Sale at Kansas City, Mo. ords. 6-7.—C. S. Barclay, West Liberty Shorthorns.

TEXAS FÉVER.

The RURAL WORLD has referred number of times to a bulletin that was a course of preparation at the Missou Agricultural Experiment Station an which would give the results of the investigation. tigations that have been going on at tha and the Texas Station for a number of ears as to methods of rendering norther

grown cattle immune to Texas fever.
This bulletin, No. 48 of those issued by
the Missouri Station, is now ready fo
distribution to those who apply to the secretary at Columbia for copies. an exceedingly valuable document and of an exceedingly valuable document and of great interest to all breeders of pure breed cattle the world over. Missouri cattle breeders particularly are to be congratu-lated on the fact that such important work in the interest of cattle husbandry as is embodied in the bulletin is being done at uri Station. The builetin is by Dr. J. W. Connaway, Veterinarian of the ouri Experiment Station, and Dr. M. cis, Veterinarian of the Texas Sta-We quote from the bulletin the fol-

GENERAL OUTLINE OF THE WORK. many years Texas fever has been a serious obstacle to the growth of trade in blooded breeding cattle, between the Northern breeders and the Southern cat-tle raisers. The losses from this malady

orted herein.

erative work was begun in

bably much work yet to be done methods, which can now in

careful hands be employed with a great degree of success, reach the perfection that is desirable.

first two lines of work will be given in

The final results of the experiments on inoculation with sterile serum show that such material possesses no protective

employed with success, but on account

employed with success, but on account of the necessity of maintaining a quaran-tined pasture, and the necessity of hand-feeding in the case of calves of non-im-mune cows, this method is not as prac-ticable as that of blood inoculation.

In the blood inoculation experiments, over four hundred head of thoroughbred cattle have been used. The losses fron

ulation and from sub

of the disease, that might be used in a practical way in bringing about immunity in susceptible cattle.

The value of such a material would be that the danger of the development of an acute fever that attaches to other methods, as "rick infestation" and "blood inoculation," would be avoided. Moreover, the material could be transported and used at any distance without the dangers from septicaemia that are liable to arise from the shipment to a distance of blood containing the living parasites.

The discovery of the protective properties of the serum of animals made imment came from different sources than that used in the Mississippl experiment—one lot was obtained from the Texas



ological disturbance was noted; indicating that no oxic substance was present. Blie from the same animal was used on another or cow with like results. Both cows died from acute cases of the fever after tick-intensive for medical treatment will be nective from the same animal was used on another or cow with like results. Both cows died from acute cases of the fever after tick-intensive for medical treatment will be nective from the natural disease older animals.

While the desired economic end of this experiment was not attained, the data upplied in regard to the effects of tick nfestation are 'valuable in the experi-nents that follow. It appears that so far as experiments

have yet shown, the only way of produc ing immunity is through an actual attack of the disease, induced either by "tick in festation," or by "inoculation with living infected blood."

II. Experiments on Immunizing Again. Texas Fever by Tick Infestation of Your Cattle.—The fact has long been known ockmen that calves are more resistan to Texas fever than mature cattle. The me fact has been observed in all scien tific investigations of this disease where young and mature cattle were used. In the investigations of Smith and Kil-bourne, into the nature and means of transmitting Texas fever, a large per cen of adult susceptible cattle used in their xperiments died when exposed to the infection, while only a small per cent of the young animals succumbed. The cas of the dairy herd at Enterprise, Mississipp (mentioned under "serum inoculation") illustrates in a marked manner the greater resistance of young animals as pared with those more mature. In this lot were eleven head of grown cattle, four yearlings and twelve calves. Out of this number, all the grown cattle except one died; while two of the yearlings and all the calves lived. Those that survive had been grossly infested with ticks and

in cattle shipped from the north are rare- latter malady. And it was not unrea-In cattle shipped from the north are rarelatter maiady. And it was not unrealatter maiady. And it was not unreasonable to suppose that, in the physiologleal processes by means of which immunity is established against Texas fever,
remains Stations of Missouri and Texas
and the Missouri State Board of Agriculble animal, a condition or metabolism like
the stations of the immunity is established against Texas fever,
some new product should be formed which
might stimulate in the cells of a susceptible animal, a condition or metabolism like ture to undertake the experiments re- that of the cells of the immune animal, and thus establish at least a passive imn in munity that would tide the animal over the danger period following tick-infesta-This co-operative work was a substitute of the cattle industry demand that the results obtained up to the present time The first experiment with sterile serun

Young Fever Ticks, "Boophilus Bovis," and Eggs-Highly Magnified.

the disease by means of tick-intestation.

III. Experiments on immunizing cattle
by infection with the micro-parasites of
the disease through blood inoculation.

These will be discussed in the order
named. Only a brief discussion of the

The first experiment with sterile serum inoculation was made in the fall of 1886, on an eight-year-old cow. Two hundred cc. of serum were inoculated subcutaneously during a couple of weeks previous to infesting her with ticks. After the be presented in official form. There is The work reported herein includes:

I. Experiments to determine whether sterile blood serum of immune southern cattle contains any chemical substance of the nature of an antitoxin, or toxin, that might be utilized practically in stimulating at least a passive immunity in susceptible cattle. II. Experiments on immunizing cattle infection with the micro-parasites of g. Outwardly, the animal appeared to be disease by means of tick-infestation.

Therefore in proposition cattle in perfect health throughout the experiinfection with the micro-parasites of F

The following spring, inconjunction with the Mississippi Experiment Station, a lot In the serum experiments of the follow

following tick infestation, 103.8 F. and 106



Group of Inoculated Shorthorn Heifers, Raised in Cooper County, Mo., That Have

to infected pastures in Texas, have been less than eight per cent. less than eight per cent.

The cause of "Texas fever," and the means by which it is transmitted, have been so fully presented in Experiment Station Bulletins, and in the agricultural press, that any extended treatment of these matters will be unnecessary for the

sequent exposure

purpose of this bulletin.

It will be sufficient to state that the cause of the fever is a minute parasite occurring in the blood of southern-raised scribed.

nary circumstances no illness, these cattle being immune; but when transferred in any considerable numbers to the blood of northern-raised cattle give rise in the latter to a serious fever.

The natural way in which these microparasites are transmitted is by means of the southern-cattle-tick (Boophilus bovis). The disease can also be induced artificially in susceptible cattle by hypodermic in-These experiments were not regarded

The disease can also be induced artificially in susceptible cattle by hypodermic injection of infected blood from southern cattle.

1. Experiments on Inoculation of Northern Cattle With Sterile Serum from Immune Southern Cattle With Sterile Serum from Immune Southern Cattle whether the serum of the blood of immune southern cattle contains any chemical substance, apart from the living organisms

une to certain diseases, as diphtheria and tetanus, led to the somewhat broad datement by Behring, one of the chief investigators of serum therapy, "that if an animal has acquired immunity against a disease-producing micro-organism, or its toxins, the serum from the blood the immunized animal will prevent the disease in another ausceptible animal." While Texas fever is due to a protosoon of micro-parasite, instead of bacteria as in the disease of diphtheria, the immunity at the case of diphtheria, the immunity at the case of diphtheria, the immunity at the disease appears to be as great as in the dividence of the control of the case of diphtheria, the immunity at the case of diphtheria, the immunity at the case of diphtheria, the immunity at the case of the case of diphtheria, the immunity at the case of diphtheria, the immunity at the case of the control of the case of diphtheria, the immunity at the case of the control of the case of diphtheria, the immunity at the case of diphtheria the immunity at the case of diphtheria, the immunity at the case of diphtheria the immunity at the case of diphtheria the imm



Group of Inoculated Hereford Bulls, Six Months After Exposure to Infection at the Laurels Ranch, Corpus Christi, Tex.

ssary in some cases, and cannot be car- | are more liable to die, leads to the conclu

are more severe; some signs of Illness days, but recovered and have done go are expected in all that become properly service. are expected in all that occome properly immunized and attention is necessary through the inoculation fever. Moreover, some attention must be given throughout the first season of tick infestation to pre-vent fatal relapses, especially in the older bulk.

SUMMARY AND CONCLUSIONS.
The Inoculation Fever and Immunity.—
The reports on the Tod cattle, page 24, "College Station" lot, page 43.

to the pathology of Texas fever and how immunity against it is acquired and main-tained, will ald in the more intelligent handling of inoculated cattle, both during the course of the inaculation fever and during exposure to the infection at the

essary in some cases, and cannot be carried out intelligently without a practical knowledge of the pathological processes.

The impression prevails that inoculation against "Texas fever" is as simple
and harmless as inoculation against
"black-leg." On the contrary, the effects
are more severe; some signs of illness days, but recovered and have does good

Source of Blood for Inoculation.-Bloo from two sources has been used; namely, from naturally immune southern cattle, and from northern cattle made immune by artificial tick infestation, and blood by artificial tick intestation, and blood inoculation. It is probable that the method by which an animal has been made immune can make no difference in the quality of the blood, since the same end is attained—a permanent infection. Recent observations, however, have shown that the blood of different supply animals may differ in virulence; and that oculation fever, such as incubation period, duration and severity of the primary and secondary fevers. Attention is called in the graphic record to the sudden fall of the primary fever; this occurs in many cases, and appears to be the critical period. At this time collapse and death may occur in severe cases. fail of the primary seems and appears to be the critical period. At this time collapse and death may occur in severe cases.

The variation in the percentage of corpuscles during the fever, in comparison with the variation of temperature, is shown in College Station experiment, see that the diminution in corpuscles corresponds closely to the rise of temperature, but continues for a time after the temperature has fallen; and that during the interval between the primary and secondary fever heriods, the percentage rises, but falls again on the occurrence of the secondary fever periods, the percentage rises, but falls again on the occurrence of the secondary fever matokrit readings for each animal, and the average for the group.

The table, page 47, gives the hasemer and that that the must always be kept in mind that it must always be kept in mind tha summer, in doses of 2 to 6cc. on a few cheap experiment animals without show-ing as severe symptoms as appeared in others inoculated in the fall with doses of 1 to 3 cc., after the supply animal had become grossly infested with ticks. It is experiments carried on.)

III. Experiments on Immunising Norther and the Lagainst Texas Fever by Incolulated active, both during exposure to the infection at the lineculation of over four hundred regists tered breeding cattle raised north of the Texas fever quarantine line, and shipped into infected territory in the State of Texas.

As attacted in the introductory section at Sate and in the introductory section at East and the introductory section at East and the introductory section are report at the sourt.

As attacted in the introductory section at East and the introductory section are report at the South.

As attacted in the introductory section at East and the introductory section are reported into infected territory in the State of Texas fever can be induced artificially in northern raised cattle by hypodermic injection of blood from immune southern cattle. This discovery was made by Drs. Smith and Kilbourne, in their classical integrations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever can be induced in this artificial way "was not so the pathology of Texas fever. In the course of these investigations into the pathology of Texas fever can be induced in the introductory section and the pathology of Texas fever can be induced in the introductory section at the blood stream.

The recovery from the fever and the pathology of Texas fever can be incompleted by the pathology of T

parasites; second, to supply new corpusedes as rapidly as they are destroyed; and, third, to remove the waste products promptly.

In regard to the micro-parasites, it is found that in this disease, unlike most of them to the micro-parasites, it is a supper from the blood could not be used for a dark of the found that in this disease, unlike most of them, they probably never entirely dust of them to the supper from the blood contains and an odoubt many of the Texas of them they are the supper from the blood contains comparative. This indicates that by some means their multiple catton is inhibited. It is probable that the constant presence of the micro-parasites. This indicates that by some means their multiple catton is inhibited. It is probable that the constant presence of the micro-parasites are destroyed.

As to the regeneration of the red blood corpuscies, this is a function that is carried on normally; for in perfect health the corpuscies are constantly wearing out and must be replaced by new ones. The licreased destination of waste production of the red blood corpuscies, this is a function that is carried on normally; for in perfect health the corpuscies are constantly wearing out and must be replaced by new ones. The licreased destination of waste production of the red blood corpuscies to greater activity of these traces in the production of the red blood corpuscies to greater activity of these traces in the production of the red blood corpuscies to greater activity of these traces in the production of the corpuscies to greater activity of these traces in the production of the corpuscies to greater activity of these traces is maintained throughout life.

In regard to the elaboration and removal of the waste products as the cold. It is maintained throughout life.

In regard to the elaboration and removal of the waste products as the post-maintained throughout life. It is probable that the cold. It is maintained throughout life. It is probable that the life the life that the life that the life that the lif

Retapses.—A rew deaths occurred four or five months after the cattle were exposed to infected grounds. In the Green herd ten head died. Among the Tod bulls, two of the oldest animals tiled, and another of the large ones was sick. A few

two of the oldest animals viled, and another of the large ones was sick. A few of the smaller ones were a little off. Both of the Waskom two-year-old bulls were sick, but recovered.

All of the bulls had ripened a few ticks without showing any fever. The Tod bulls had been well infested, but at the time of death were carrying only a few ticks. It appears that in the Green herd a number of the calves did not pick up many ticks until well along in the summer, when they became grossly infested. In this case, the long interval between incoulation and gross infestation may account for the result. An additional incoulation or several mild tick infestations earlier in the season might have given the

lot were not made.

In the case of the Tod and Waskom bulls, the owners think that the relapses were preferable. Capt. Tod says: "I have now no doubt but over excitement, over service, and over heating aggravated by fighting a good deal, was the cause of their succumbing," and that this result could have been avoided by putting these.

We all will welcoment in quality of the general cattle stock of the state as well. We all will welcome the speedy return of the conditions when lower feed lots can be filled with high grade Teeders, bred and raised on Iowa soil, instead of having to bring them from the Western ranges.

There is, too, among breeders as well as uld have been avoided by putting these ulls with a restricted number of cows, those starting herds, an ever increasing ach in a small pasture where they would tendency towards making quality, which not have had the trying conditions of worrying with other buils. "Three others that showed signs of relapse were taken away from the cows for ten days or more and nursed up, then turned back to serand nursed up, then turned back to service. They have been well ever since."
These relapses show that it probably requires a full season at the south before northern bulls acquire that degree of immunity possessed by southern-raised animals. Care should therefore be taken during the first season to avoid all couditions that tend to lessen the vitality of the animal. With proper care but few bulls that have reacted from the incoular lossessibility, and she uscally is highly.

vice. I estimate that they have sired 200 raising calves." calves."

Waskom.—"The bulls run daily with the

spiecn, liver, kidneys and bowels. The importance of these organs in removing waste products is readily understood by any one who has seen at the post-mortem of an animal that has succumbed to an acute case of the fever, the enlarged and softened spiecn, the intensely yellow liver, clogged with bile, and the clarut colored urine. In immune Bouthern cattle the spiecn is somewhat larger than in Northern cattle, which indicates that a more active condition of this organ and probably of the other organs mentioned is maintained, shows the importance of keeping an animal well nourished and seeing that the eliminative organs are active.

Age of animals.—The most suitable subjects for inoculation are young cattle from \$102 months old, weighing from 500 pounds. They are more easily cared for than younger or older cattle. Calves recently taken from the cattle should be put in the above deasily cared for than younger or older cattle. Calves recently taken from the cow and not well accustomed to a grain and hay diet do not do well; they fail off in fiesh and do not regain condition as rapidly as older, well-weaned calves. In the save the safely inoculated if kept with tecks, as this may persistence, to prove a torgan mentioned is minuted by the control of the organs mentioned is maintained, shows the importance of keeping an animal well nourished and seeing that the eliminative organs are active.

Age of animals.—The most suitable subjects for inoculation are young cattle from \$102 months old, weighing from 50 mounts of the provided. The cattle should be put in the above described enclosure immediately on their arrival, and allowed some time to recover from the effects of their journey; say ten or fifteen days, before being inoculation for the past of the provided of the ing cotton seed hulls and a mixture of bran, oats and cotton seed meal. They should not have free access to cotton seed in large quantities, as this causes a very troublesome diarrhoen in some calves. In many parts of the state the cactus is abundant. This is a very suitable food for cattle during the inoculation fever, as it contains a mucliaginous substance which has a laxative effect. If this be not available, a few acres planted in oats furnishes an excellent winter pasture.

Relapses.—A few deaths occurred four of five months after the cattle were exposed to infected grounds. In the Green herd ten head died. Among the Tod bulls, two of the oldest animals tiled, and analysis and contains a mixture of that trade.

Renewed interest is being taken in making exhibits at state and local fairs.

making exhibits at state and local fairs.

earlier in the season might have given the men't of the use of the mixed bred and necessary stimulation to effect immunity. grade sire, by the average farmer, and necessary stimulation to effect immunity.

In this case it is not known whether the buils that died had reacted well from the inoculation as individual records of this well, not only for the future of the breed-

There is, too, among breeders as well as

STOCK NOTES. FRED A. DALTON, Walker,

breeds Shorthorn cattle and Poland-"The oldest heifer produced hogs and is building up fine herds of both. hogs and is building up fine herds of both. At the head of the Shorthorn herd is Advance, 132-54, a fancy, deep red, low down beefy two-year-old, bred by Mr. H. A. Barber, or Windsor, Mo. Advance is by Duke of Chayer Leaf, 13,5i3, and out of Julis X., by Duke of Sutherland, 3,500, tracting so imported Belina, by Barmpton (54). Mr. Daiton's Poiand-Chinas represent the Chief Tecumseh, Chief I Am, King Hadley and other leading strains. Mr. Daiton bought at the Young & Turly sale two fine gitls, one by Missourl's Black Chief, 19,399, and the other by Turly's Chief Tecumseh Jnd, 17,578. In a recent letter from Mr. Daiton, he writes as follows: "I have been a reader of the

Horseman.



colts at this season of the year and see that all their wants are satisfied, will ey by it. Water should be sur a day and always be

withstanding Mambrino King was as a constituent of the past strings of harmes are chorses in the whole comit try. From the past of your affects dark compared in the best placed horses in the work, and was used for driving good strains than they ever knew, the control in the following: "Man as an ancient, useful friend, the horse, is doomed to swift oldivion."

On the horse page of the same issue we find that a Allsoonir beed ecologies frought. The same sais and 3 daughters that had produced, one of them being the dam of the great Miss. The same sais and 3 daughters that had produced, one of the same sais and 3 daughters that had produced, one of the same sais as sour bred coil. Grattain flow, Seek withful the same sais as young stallon brought \$20,000. Verily the passing of the horse is placing some strongs guide posts along its way to the promised old bloom. There is the passing of the horse is placing some strongs guide posts along its way to the promised old bloom. They are said and the same sais and beautifully less as we enter the new century. While we sed to compute, \$20,000. Verily the passing of the horse is placing some strongs guide posts along its way to the promised old bloom. There is an an an beautifully less as we enter the new century. While we sed to compute, \$20,000. Verily the passing of the horse is placing some strongs guide posts along its way to the promised old bloom. There is an along the passing of the same sais and post the passing of the horse is placing some strongs guide posts along its way to the promised old bloom. There is an along the passing of the solid bloom the posts and the sum and while the same and the sum and while the passing of the solid bloom the passing of the posts and the sum and the passing the passing of the passing the passing of the passing the passing of the passing t

er of the RURAL WORLD, has struck a paying lead of Jack on his farm, three miles west of Sarcoxie. It is to be hoped that for a long time to come his Moncay morning check for royalty will be a large one and come regularly.

At Wm. I. Miller's at Pennsboro, in Dade county, I found one of the hand-somest flocks of Barred Plymouth Rocks I have ever seen. Mr. Miller has been buying the best for five or six years, and



nemselves breeders.

At the home of S. M. Cox, South Gr

they need refreshing sleep like all animals. Keep them growing. Not a day
should pass without some growth, or
what has been fed to them has been wasted. To get value out of the feed one
must get weight, growth, size, and if colts
are well fed and treated every day's feed
will increase their value.

In a late issue "The Horseman" says:

In a late issue without some growth, or
when has a great showing for his first
was made when Bob Riley was added to
the list of geldings. The Year Book gives
hobby as made when Bob Riley was added to
the list of geldings. The Year Book gives
hipped to California to winter, where
shipped to California to winter, where
the play which was a great showing for his first
was made when Bob Riley was added to
the list of geldings. The Year Book gives
hobby as a more mand Robert J. were both
shipped to California to winter, where
the play was added to
the list of geldings. The Year Book gives
hobby as a mand that a great mistace
which was a great showing for his first
was made when Bob Riley was added to
the list of geldings. The Year Book gives
hobby as a mand that a great mistace
which was a great showing for his first
was made when Bob Riley was added to
the list of geldings. The Year Book gives
hip was added to
the list of geldings. The Year Book gives
hip was added to
the list of geldings. The Year Book gives
hip was added to
the list of geldings. The Year Book gives
hip was added to
the list of geldings. The Year Book gives
hip was added to
the list of geldings. The Year Book gives
hip was added to
the list of geldings. The Year Book gives
hip was added to
the list of geldings. The Year Book gives
hip was added to
the list of geldings. The Year Book gives
hip w B., 2:16½, at three years I do not find in with Robert J., but with all comers, until the tables of the Christmas issues. He was he became famous as a race-horse of

Macol R., by Mainterine Patchen, and now have seen and the seed of the patch of the patch and ystalling might be broud to have to-with the patch of the patch and ystalling might be broud to have to-with the patch of the patch and ystalling might be broud to have to-with the patch of the patch and ystalling might be broud to have to the patch of the patch

	AXTELL AS A SIRE.			
	The following is Axtell's list for 1800:			
	Axtonian2:19 Axtelline2:263			
	Queen Regent .2:231/4 Axeyone2:213			
	Tesse S 2:1214 Axelina 2:2914			
	Axmont :2:29 Axdelight2:291/			
	Annatelle2:201/2 Telltale2:233			
	Acharm2:30 Axlick2:299			
	Axineer 3:221/4 Betseytell 2:291/4			
	The list of Axtells in the list previou			
٩	to 1899 is as follows:			
	Elloree			
	Axworthy2:15% Actstell2:16%			
	Axie Lee2:18 Allentell2:205			
9	Bounder2:221/2 Maytell2:24			
H	Woodtell2:24 4 Rushtell2:17%			
١	Katie Bradley 2:30 Acteli2:183			
ı	Tarantell2:21 Axtelletta3:223			
1	W.C. Mayberry 2:214 Praytell2:009			
ı	Axmere2:13½ Col. Axtell2:30			
ı	Ax'e2:15% Axinite2:17			
ı	AX 6			

Wolfborough, Dec. 20, 1892.

good clover hay make the best feed for young good clover hay make the best feed for young stock, as they supply muscle and Brothers, who have Don Medium, a son of bone-growing material. See that they are not exposed to rainstorms—but that in dry weather they have a run in the pad-docks and fields. Have warm beds for These gentlemen bred this horse and fields. Have warm beds for These gentlemen bred this horse and the champion, was of course the tardocks and fields. Have warm beds for These gentlemen bred this horse and the champion, was of course the tardocks and fields. Have warm beds for These gentlemen bred this horse and the season, forced him out at Indianapolis that Bob Riley was a brother to the course the gentlement of the ge ing the champion, was of course the target to fire at. Patchen raced Robert J. ale
the season, forced him out at Indianapolis
in 2:02½, and was timed separate in 2:02¾,
which was a great showing for his first
year.

Patchen and Robert J. were both
shipped to California to winter, where
also be located here. His brother, Baron
also be located here.

these younger horses as compared with those that preceded them. The horses of ten to twelve years ago were mainly Hambletonian and Wilkes. The present supply are generally Wilkes and Election-ser. I recall no stallion now in service in not trace to Hambletonian. There is or the Clay family, but his dam was by Vo

The Wilkes family is still in great force.
Onward, Jay Bird, Young Jim, Patchen
Wilkes, Witton, Wilkes Boy, Ashland
Wilkes, Allie Wilkes, Chestnut King,
Moko, Silent Brook, J. J. Audubon and
Red Chute (inbred Wilkes) are all repre-

bighest rank. Some account of his breeding and performances, by Mr. Charles Rathbone, the man who raised him, is given in "The Horse Useful," the December quarterly report of the Kansas board.

Mr. Rathbone says: Joe Patchen, the pacing stallion, iron race-horse of the age, so well known throughout the racing circles of the world, was foaled at Peabody, Kansas, May 5, 1889, and bred by C. and M. M. Rathbone, who also bred his dam, Josephine Young, by Joe Young. Patchen's untiring courage as a race-horse seems without a peer. In his first year on the grand circuit be raced against the worthy of his pre-eminently great line.

a small sliver to penetrate the gum or t of a milk molar will cause a gre unsuspected. Some horses have teeth that are soft or soft in spots, and they went unevenly, making a tooth that lacerate the tongue or cheek. Some have elong

Horse Owners! Use GOMBAULT'S Caustic Balsam The Safeet, Seek Big 15 TE greety and feetiles Can the piace of all liainests for mild or severe action. Reserves Succession Signature of the piace of all liainests for mild or severe action. Regreet Can the Canada Cana

THE GREAT JOE PATCHEN.

Editor RURAL WORLD: The accretary base signalized his entrance to the list of sires by producing two of the most remarkable two-year-olds of the year. One of the most remarkable two-year-olds of the year. One of the most remarkable two-year-olds of the year, while year,

Veterinary.

Answers to questions in this department are given by Dr. T. E. White, Stat Veterinarian for Missouri. Write questions on one side of paper only, and sey arate from other business.

Frederick Hukriede of Lincoln has a horse with the heaves and wants the RURAL WORLD to tell him what to do with him. Dr. T. E. White, State Ve

oo with nim. Dr. T. E. White, State V. erinarian, answers as follows:
Heaves is an incurable disease from t fact that the trouble is due to a ruptu of the air cells of the lungs, the air rus ing in and out with each respiration ing in and out with each respiration—the ruptural edges are kept apart so that it becomes impossible for them to again united to the control of the control

FISTULA.

Editor RURAL WORLD: Will you please it me know through your paper what will cure fistula before it breaks? I find plenty of recipes for curing fistula after it breaks. W. W. ELSON.

Henton Co, Ark.

Answered as follows by Dr. T. E. White, State Veterinarian:

As a rule, fistula is caused by an injury. In time the bruised tissue becomes dead, and the surrounding parts being affected by the obstructed circulation, an inflammation sets up which causes put to form and accumulate. The matter having no outlet it burrows between the interstices of the muscles and new centers of inflammation, and decay are started.

To treat successfully—dissect all decayed and decaying material, and if thoroughly done of the muscles and new centers of inflammation, and boe, and one that will heal readily, with the same simple remedies used in barb wire cuts.

If from some other cause an enlargement forms on the withers and there is no decay going on within, it indicates a tumor of some kind. If painful and feverish, a wet pad kept constantly on it both night and day for several days, tends to reduce the swelling and to drive it away. Any number of cases have been cured by this method.

On the other hand, if the tumor is cold.

Any number of cases have been cured by this method.

Any number of cases have been cured by this method.

Le, has no fever in it, a good bilster of strong tincture of iodine applied daily with a brush will be the proper remedy, first, however, clipping away the hair from the parts. This treatment must be kept up until a good bilster is established.

Crippie Creek, Colo., July 16, 1897.
Dr. B. J. Kendall Co.
Dear Birs:—Having cured with your
Kendall's Spavin Cure a very severe case
of Spavin on both legs of a valuable horse
two years ago and have eaself for other
sores, etc., or horses, and the very case
found it to do the wo Book by return mal,
as I keep several horses I find it most
valuable. Your medicine is here in stock
at all times. I enclose you stamp for the duante.

I enclose you
t all times. I enclose you
tooks. Yours truly,
CHARLES HASCALL.



CARGET, Lump Jaw, Big Knee, in fact, any inflammed, oft bunch, also strained joints

ABSORBINE RelievesRheumatismand Gout in Mankind. \$2.00 per bottle delivered, or at regular dealers. 28 cents for sample bottle.

W. F. YOUNG, P. D. F.,

"CORED TO DEATH"
Is the starting headline of many a news
paper article. Forming animals are as well
Peter Proper article. Forming animals are as well
Peter Property of the Company of the DEHORNING HODE WITH the tin than any device a side at once-clean crushing or tearing to Crushing or tearing to Crushing to Cook the Crushing the Crushing

50 SHORTHORN BULLS and HEIFERS For Sale. They were stred by the famous Red For Sale. They were stred by the famous Red Bull Sale of the Sale of Rardson 138907. First and less pure Orsiokshanks, the other two Cornickshank crosses. Five rozas, others reds Good individuals. For prices, etc., address W. H. M. STEPHERS, Sunceton, Mo.

40 High Jersey Heifers FOR SALE!

Will come fresh in the spring. Price \$30 each. JOHN PATTERSON, Kirksville, Mo.

R. S. MAIRS, Reger, Sullivan Co., Mo. Prop. Mount Vernon Hereford Farn of and dealer in pare bred Horaford Cestle. Sir Allawell Ho. 68773, a worthy son or Fo. 48876 beach the beer. Funcies of choice breeding and individually good. Choice Fo. Associated beach the bree. Also 100 pare bred beary weight Light Brahma chickens always welcome. Correspondence societied. Parm two miles from Rager. Take

Peabody Shorthorns and Berkshires

A few extra good young bulls from 18 months to 2 years. Also the grand Creickshank bull Scottisk King, out of Red Maid, and by a grandson of Imp. On Searer. Int Berkshires, all ages to reale cheap. Address.

FAMOUS DEHORNING CRAYON!

"Pasteur" Black Leg Vaccine

The original and genuine preventive vaccine remedy for blackleg. Officially endorsed in all the cattle raising states. Successfully used upon 1,500,000 head in the U.S.A. during the last 4 years. Write for official endorsements and testimonials from the largest and most prominent stockraisers of the country. "Single" treatment vaccine for ordinary stock;" "Double" treatment vaccine for choice herds.

REGISTERED-"BLACKLEGINE"-TRADE MARK. "Pasteur" single treatment Blackleg Vaccine ready for use (no set of instruments required.) Sold in packages;—No. 1 (16 head) \$1.59; No. 2 (26 head) \$2.50; No. 3 (56 head) \$6.00. Easily applied. No experience necessary.

PASTEUR VACCINE CO., 48 Pitth Ave.
Branch Offices: Omaha, Ft. Worth, San Francisco.

WILLIAM MAFFITT, CHARLES PARSONS, W. A. RAMSAY,
President, Vice-President, Sec'y & Treas

MISSOURI STOCK YARDS,

ST. LOUIS, MO.

FORMERLY UNION STOCK YARDS, St. Louis.

W. A. RAMSAY, Manager.

ST. LOUIS NATIONAL STOCK YARDS,

THE LIVE STOCK MARKET OF ST. LOUIS. ated at Bast St. Louis, directly opposite the city of St. Louis Shippers should see that their stock is billed directly to the

National Stock Yards.



"STEVENS FAVORITE" RIFLE



In the "Favorite" Rifle we offer a strong and thoroughly-made arm, perfect in symmetry, safe, accurate and portable. The price is as low as is consistent with the best workmanship. For this rifle the standard length of barrel is 22 inches; it is octagon to forward end of fore-end, stock is finely modeled, and bear took is finely modeled.

and round the rest of its length. The stock is finely modeled, and has a shotgun butt. The weight of rifle complete is 4½ pounds.

Free for a club of 10 subscribers and \$10.00.

COLMAN'S RURAL WORLD, St. Louis, Mo

"Invincible, Unsurpassable, Without a Peer,"

Writes a regular subscriber, who has read it for many years, of the Twice-a-Week issue of the

St. Louis Globe-Democrat

andthis is the unanmous verdict of its more than half a andthis is the unanmous vertice of its more than half a million readers. It is BEYOND ALL COMPARISON, the biggest, best and cheapest national news and family journal published in America. It is STRICTLY REPUBLICAN in politics, but t is above all A NEWWIPAPER, and gives ALL THE NEWS promptly, accurately and impartially. It is INDISPENSABLE to the Farmer, Merchant or Professional man who desires to keep thoroughly posted, but has not the time to read a large daily paper, while its great variety of well-selected reading matter makes it an invaluable Home and Family Paper. ABLE HOME AND FAMILY PAPER.

Two Papers Every Week. Eight Pages Each Tuesday and Friday
One Dollar For One Year. Sample Copies Free.

GLOBE PRINTING CO.,
ST. LOUIS, MO
Rural World and Clobe-Democrat-Either Address, \$1.25 Net.

1839. The "Correctors" are here. 1809. The "Improvers" are coming. WEAVERGRACE HEREFORDS. The Weavergrace Weavergrace
present
will bear
the
closest
scrutiny
and with the approval

No attainable factor will be neglected to make the Weavergrace future excelvits present and past. We aim openly, honestly and essengetically to make this the best herd in the world. Color-type of Corrector (LOSS) free to all who will frame it. Bestlord breading oatte and steer T. F. B. SOTHAM.

G. W. JOHNSON, - Lexington, Mo. Breeder of Polled Durham Cattle. Buils ready for service, blocky, well marked, cool individuals. Write for what you want or ome. Prices reasonable. ENGLISH RED POLLED CATTLE ENGLISH Pare blooded and extra dise stock. BY Your orders colletted. L. E. HASSLITNE, Dorohester. Green Co., No.



Special 60 Days' Offer! Wagon and Stock Scales of all makes at a dis-count of 30 per cent. 500 Portable Pistform Scales at 40 per cent discount for cent. Have scales with self-deling beams. On telah. Have

Before Buying a New Harness KING HARNESS COMPANY, Mfrs

Look at that Leg! H. H. HAMER, Vermont, III.



WATCH AND CHAIN FOR ONE DAY'S WORK

AUCTIONEERS.

Home Circle.

ritten for the RURAL WORLD. TO RAPHAEL'S CHERUBS. Frances P. Carson

Tell me, sweet cherubs, so pure and se restest thy forms of dim race gazest aloft with enraptured face,

What has arrested thy swift, lofty What is revealed to thy wondering sight For methinks I read in thine upturne Adoration, joy and happy surprise.

om far angel lands didst thou flit away watch the bright dawn of a better day? Didst thou trace thy way by the heav-enly light Left by the Bethlehem Star in its flight?

When angels hovered o'er Bethlehem' too, proclaim in heavenly ice and good will that came to sinless Babe at his lowly

are come from happy lands on our Father bid to hover near y Child, 'tis this our missi

rude, manger cot close watch we ep, of his Homeland whisper all the Till in his dreams he answers with

stone.

s guard through childhood we are bid
to be,
oring, loving his sweet company."

Written for the RURAL WORLD.

(Concluded from last week.) (Concluded from last week.)

Flakes of snow were beginning to fall woods north of here. We camped out for when she went into the house. The people were gathering in the bright church before she lighted her lamp and sat down with her feet to the little stove. She heard sweet young voices singing about "Peace on earth" and "Christmas Bells," or the woods changed some, but turn the woods changed some, but turn the woods changed some, but turn he woods changed some, but the glory of changing colors found be were gathering in the bright object. The had the pleasure of being the first white woman who had even penetrated so far north in this direction. During the autumn the woods changed some, but we miss the glory of changing colors found them and being young again." So she distened to the music and saw the happy heeple going in. She took her Bible and read over the sweet old story of Bethlemen's baby. She read on and on; the hights went out in the church and the happy ones went home carrying gifts given and taken in the name of the One about whom she read. The wind blew the snow around the old house and piled it three or four salutes with dynamite, written for the RURAL WORLD.

WORDS OF SYMPATHY.

Words were taken white woman who had even penetrated so far in this direction. During the autumn the woods changed some, but we miss the glory of changing colors found the pleasure of meeting Mrs. Menaugh's mother on one or two occasions, when I was greatly impressed with her real kindless of heart, and genial, unaffected manner. She was, I am certain, a faithened when she read over the church and the hights went out in the church and the house and taken in the name of the One about whom she read. The wind blew the strength of the pleasure of meeting Mrs. Menaugh's mother on one or two occasions, when I was greatly impressed with her real kindless of heart, and genial, unaffected manner. She was, I am certain, a faithened when she read over the woodland and me. A party of ladies came visiting, perhaps a dozen in all. They brought a number of small folks that kept us all busy as long as they stayed.

After dinner some of the boys fired three or four salutes with dynamite, when the pleasure of meeting Mrs. Menaugh's mother on one or two occasions, when I was greatly impressed with her real kindless of heart, and genial, unaffected manner. She was, I am certain, a faithenes of heart, and genial in the st as they stayed.

After dinner some of the boys fired show around the old house and piled it into the vine that encircled her window, framing the picture of a little old woman in her arm chair with her lamp and fire and open Bible. People smiled as they looked into her window and said: "She looks very comfortable." At last she read where Christ found himself simost forsaken by all, but in his great anguish of mind and body he provided a home for his mother, and there she stopped reading. Never before in her life had she felt so utterly alone. "Where could I go?" when meeting one of the friends that before the meeting into meeting the some of the proper sale when meeting one of the friends that before the meeting into meeting the meeting into meeting the meeting one of the friends that before the meeting into meeting into meeting the meeting into meeting into meeting into meeting the meeting into meeti

so utterly alone. "Where could I go?" she asked herself. She remembered how Carrie had come to her with tears just before she left her and had said: "Mothbefore she left her and had said: "Moner, it breaks my heart that I cannot take
you home with me, but I can't now, but
I am going to try to arrange it before
very long." The mother had replied: "O,
don't cry, child: I'm used to the old place
to said the provided to the old place
to said the provided to the old place
to said the provided things to going as of lod.
It has been an exceedingly pleasa
winter so far, here on the mountain sid
We have been building; have had muc
company and have made several pleasa
things so have had not time to be lonely. here and I should get very home-sick I ow, and then such a plain old body as

Bob; over and over she repeated the same pitiful pleading prayer and then nt angels into the gray old house. God sent angels into the gray old house. Ferhaps they came trooping in through the snow-wreathed window and the cracked door—beautiful, bright-winged things from Heaven—and they brought back the loved and lost; even her youth came back to her. Oh! how happy she

REMNANTS OF SILK RIBBONSALMOST FREE



first Christmas.

that hung behind the atove. The scene grew dimmer, the light faded and went out, a chill crept over her, the rising wind shook the old house and she awoke.

The lamp was burning dimly, the fire had gone out and the room was cold. The lonely little woman bent her gray head oney little woman bent her gray head shook with sobs because it was only what was the lonely little woman bent her gray head a shook with sobs because it was only what was the lone with the lone of the lone with the lone of the lon

and shook with soos because it was only a dream. Then she crept feebly to her lonely bed and cried again and prayed: "O, God! Bob is all I have in this world that I can go to; please send him to me, and send him quick." At last she fell No cyc but dampness of a tear, and send him quick." At last she fell into a troubled sleep. As the gray dawn of the Christmas morning crept into the shabby old room a knock was at the door.

No lifepath always light and glad, no shabby old room a knock was at the door.

No lifepath always free from thorns that wound the tolling feet, but when the cares seem heaviest then courage should be shown, some sight.

Five years after in America's summer land, where soft breezes wafted the perfume of flowers and beyond the orange grove could be seen the shimmer of the grove could be seen the shimmer of the Justice of the grove could be seen the shimmer of the grove could be shown. grove could be seen the sammer of the blue ocean, in a room surrounded by every comfort that money could buy. Bob knelt to receive his mother's parting blessing. The gray shadows were creep-ing over the sweet old face and she felt, rather than saw, his tears that wet her feeble hone, which touched his hair and feeble hands, which touched his hair and feeble hands, which touched his hair and caressed his face. She prayed softly at times almost inaudibly: "God bless Jamie, my son, in his work for Thee; bless Carrie; she has many trials; forgive her, O. Father, where she has sinned in Thy sight; and for my son who kneels beside me I pray a great blessing, and as Thou didn't send him to comfort me in Thou didst send him to comfort me in my age and loneliness, O send Thy com-

Written for the RURAL WORLD. LAKE RIDGE GOSSIP.

September was passed in the great woods north of here. We camped out for

This camping out was one or the red letter times in my life. I came home from the trip better in every way. Now, when meeting one of the friends that were with us, we say, "Oh, for the old camp days once more." It took us a week to gather up the broken threads of home life and ext things to going as of old.

where was Bob? She forgot her loneilness and the feeling of wrong treatment
that she sometimes had, in the anxiety
she felt for her wayward son. "I forgive
Carrie, poor thing; she has her troubles,
I thank God for Jamie, and if I could
only see Bob once more and know he was
all right I think I could go in peace," she
said.

for ten years. He had carried his things
in and out (over a trail cut through the woods) on foot or horseback. He told me
some queer stories of men who lived alone
for years until they acted like wild creatures. Some of them have committed
suicide. He said no truer thing was ever
suicide. He cliff, Ill.

DYPE.

On the trail to Mount Baker many little cabins may be found far up the mountain in the great woods, where gaunt, wild-eyed men dwell, who have lived for years alone. Thirty miles southeast, the Mount Baker mines are being opened up, which promise a rich harvest of wealth to the hardy men who dare all things for the RURAL WORLD.

Every weekly visit of the RURAL WORLD moves me to speak out in meeting, but when you hear my woeful story, you'll not wonder at my silence. When witing last my husband had gone to North Dakota for his health. He improved so rapidly that he was able to start home again in less than two months. While coming through Minuse was higher and the great was weeked at Grante Falls.

Whatcom Co., Wash.

TAKE YOUR MEDICINE

It isn't any worse.

The man who dodges in affright when trouble lightnings flash,
Who cringes like a beaten cur beneath affection's lash,
which was the with mute despair,
Whose the light who well,
Whose thind spirit is appalled at every threatening cloud,
Can never hope to breast the waves on life's tempestuous sea.
Can never hope to hold his place with men more brave than he;
So, timid mortal, show your nerve, fight every reverse,
And take your pill and thank the Lord it isn't any worse.

Thou didst send him to comfort me in my age and loneliness, O send Thy comforter to him when I am gone, for Thy Son's sake."

And softly but clearly Bob's voice sounded in his mother's cars as he said. "Amen!"

J. N. C. Holt Co., Mo.

Written for the RURAL WORLD.

The sunbeams of success again upon your paths will play;
Don't sit around with scowling face, your every word a curse.

And take your pill and thank the Lord it isn't any worse. -Selected.

What a charm there is in kind words How very few there are who really know the intrinsic value of words kindly spoke or even think of the happiness they may bring to those around us. In every da routine of life we are too heedless of the words we speak, too apt to forget, in the joys and cares of our own lives, that there are others, weary and suffering, to whom kind words may come as rays of bright sunshine, cheering into new life their careworn spirits. Especially is this their careworn spirits. Especially is this so of the young and thoughtless, those who are just entering upon the realities of life, to whom the trials and weariness of this earthly pilgrimage are yet unknown, do not, cannot, know the true value of kind words. Those only who have felt the want of them, perhaps bitterly, can know their inestimable worth. He reaks my heart that I cannot take in the and get things to going as of old.

It has been an exceedingly pleasant winter so far, here on the mountain side. It has been an exceedingly pleasant winter so far, here on the mountain side. We have been building; have had much company and have made several pleasant trips, so have had no time to be lonely. There are so many single men in this and then such a plain old body as ould feel dreadfully out of place in and. We found a man living near our amp who had not been out with a wago. and lonely beneath a distant sky, seeing

sense trangels motour came troughing in through the field door-beautiful. He promise a rich harvest of wearing field and better rugged depth of the the season has commenced in the sensing. The runged firms the dargers and in miles from here and it miles from here and it miles from her and arrise. The boys brought in a fine when the same and its miles from here and arrise. The boys brought in a fine when the same and the sensing the se

the promise of a white Christman. He proves as promising as her bubyhood. We continued our trip, passing as her bubyhood. We continued that the passing as the pas

was good. Then our friends and ourselves gathered up our belongings and departed for their home. We spent four
days very pleasantly with these friends.
On our return we stayed over night in
Houston, arriving home Saturday morning, having driven not less than 100 miles.
We were very tired, but much benefited
by the outing. Though my tour was not by the outing. Though my tour was no so extended as May Myrtle's, I'm sure lo extended as May Myrte's, I'm sure I derived quite as much pleasure from it. For a genuine good time give me a trip in a wagon with extended body for bed springs, taking bedding, then camp out night and day—in fact metamorphose one's self into a Gypsy.

In '79 we took a jaunt to Butte, Mont., going up the Missishpi from St. Louis

Paul to Bismarck, up the Missouri
Fort Benton, then overland to Butte Cit
taking in Helena and Deer Lodge on of
way. We returned by the way of Gle
dale and Omaha. I kept a diary of the trip and may write it up some day, if the Home Circle readers would enjoy a deeription of it.

scription of it.

My heart is crying out for sympathy.
We came into the woods four years ago
and have worked faithfully and well imake us a comfortable home. We have
planted and pruned every tree and shrub. o leave here on account of my husband's to leave here on account of my nussand a and son's health. Isn't it enough to make one heart sick? Our home with the deac, old stone fireplace is for sale. Ella Car-penter's letters are more interesting than ever, now that we have decided on this

Just think of it! Idyll has eight rooms and not a carpet in the house, or a blind to a window, or at least I suppose that such is the case. No wonder she sweeps and dusts. If my porch had a roof I would probably have a carpet on that, too. Idyll, can't I tempt you to make me a visit? Think of that fireplace with scads of rich pineknots to pile on and the probably have a carpet on that, too. Idyll, can't I tempt you to make me a visit? Think of that fireplace with scads of rich pineknots to pile on and the probably have a carpet on that they will get no more until sea with scads of rich pineknots to pile on and the probably have a carpet on that, too. Idyll, can't I tempt you to make the post of the probably have a carpet on that, too. Idyll, can't I tempt you to make the post of the probably have a carpet on that, too. Idyll, can't I tempt you to make the post of the probably have a carpet on that, too. Idyll, can't I tempt you to make the post of the probably have a carpet on that, too. Idyll, can't I tempt you to make the post of the probably have a carpet on that, too. Idyll, can't I tempt you to make the post of the probably have a carpet on that, too. Idyll, can't I tempt you to make the post of the post of the probably have a carpet on that, the post of the probably have a carpet on that, the post of the post o ut through the window. It does seem s if the demon of ill luck were dogging ur every foot-step. I'm thoroughly dis-eartened. If the contemplated move rings us health and plenty, the sacrifice will not seem so great, but the future is mystery that we cannot penetrate.

NANCY. Texas Co., Mo. We wish Nancy had given the name We wish Nancy had given the name of the one time Boone County family now living at Willow Springs. The RU-RAL WORLD has many readers in Boons County, and they would have been pleased to have seen the names of old We "guess" the Mountain Grove family in which there was a wedding reraminy in which there was a wedding re-cently was that of Mr. Moyer. Are we right? Home Circle friends will surely sympathize with Nancy in her trials, and wish for her and her husband and sons during the coming years health, wealth and a full measure of joy.

Poultry Yard.

ST LOUIS FANCIERS' ASSOCIATION Holds its sixth annual exhibition at the Coliseum, St. Louis, Jan. 1 to 6, inclusive. JOHN A. FRANCISCO, Sec., St. Louis, Mo.

THE SOUTHWEST MO. POULTRY AS-SOCIATION Holds its first annual exhibition in Ne vada, Jan. 8 to 13, inclusive.

ILLINOIS STATE POULTRY SHOW wili be held at Quincy, Ill., January 8-13, 1900. EDWARD CRAIG, Sec., Albion, III.

THIRD ANNUAL SHOW OF THE NORTH MISSOURI POULTRY ASSOCIATION.

The third annual show of the North Missouri Poultry Association was held in Kirksville, Dec. 4-3. There were about five hundred chickens, ducks, geese and turkeys on exhibition; they were all sizes

dream. They laughed at her doubts. "Oh! friends, or any of the new friends who lamps, etc. Bo we felt very much as that cannot be," they said. They must care to come. Many are the words we though we were invited wedding guests. The bride played wish to speak to them, but space forbids. Music was proposed. The bride played cki, 87%, 2, 5 put 31%, 90, 2 pen 187; Luck-name and led in singing.

Snyder,

S. S. Hambergs—All to Bloomenshine.
Bronse Turkeys—Mrs. F. W. Cain, 1st
old tom %; 2 hen 99%, 2 pul. %; Mrs. J. D.
Lyda 1 hen 94%, 1st young tom 95%.
Pekin Ducks—Zimmerman, 1st drake 92,
ist duck 96; F. L. Link, 3d duck 93.
Wh. Holland Turkeys and Toulouse
Geese—All to J. A. Alger.

HOW TO FEED CHICKENS.

Editor RURAL WORLD: "Try with the very best re have a yard made. In this build a per netting. In this build a pen or crib rails, raised about 15 inches from ground, no chickens can run under. fill this with Kaffir corn in the 1 then get a large box that will hold sev bushels (no matter how much) of she corn, or it may be thrown in a hea the ground. Then keep your yard c and not one grain of this feed wil wasted. All the care one will have give pienty of fresh water. But the vantage and economy in this plan ar simply to save time. Watch the c ens in the morning as they come from roost; they will go and pick up a grains and plume their feathers and showing very plainly that they prelight breakfast, knowing when they less that they are the set of th

even corn alone win do very went, only left it be where it can be gotten at plentifully and at all times.

And another thing mat it is well to remember it was a selection of the selection of th

you cannot afford it. It is sell half the hens and get a roll of wiresell half the hens and get a roll of wiresel inches wide will do-fasten down to a
10-inch board at the bottom and have the
top only come within six inches o posts to only come within hear included the top. Nail sharp stakes to the top of posts to support the wire. This is so the hens will not fly over. Make close at the hens will not fly over. Make close at the hens will not fly over.

A PERFECT INCUBATOR. food Results in Hatching Had With the Ertel Improved Victor.

How to hatch the greatest percentage of eggs with least loss and trouble is one of the important problems in the mind of everyone who embarks in poultry raising. For money thousand the problem is the problem of attention hatches the greates



M. M. S. POULTRY FENCE

ESTIMATE No. 2

DE KALB FENCE CO., Box D, De Kalb, III.

'Poultry Raising on the Farm' 2011 CENTURY POULTRY BOOK.

Barred Plymouth Rock Cockerels!

BARRED PLYMOUTH ROCKS EXCLUSIVELY!

d from my winning patient at the control of the con POULTRY.



QUICK MONEY

All right in every way, Sold at lew prices an guaranteed. Catalogue in 5 languages for 6 etc nes incubator Co., Box 88 , Des Moines, la

310 First Premiums T COST US \$4,000 Costs 150









notting he donated, the complete fences in where M. M. S. POULTRY FENCING r. price. Beduct price of netting from

Hawkin's Strain \$1 and \$2 each. Bronse Turkey Tome \$8. Yearlings \$4. One Tom and two Hens \$7. Poland-Oninas of best strains at reasonable prices. C. H. JONES, Pawnee, Illinois.

Maple Grove Poultry Yards

B. P. ROCKS! E. B. Thompon and W. S. Russells strains. 75 fine cockerels bred from a cockerel that scored 93th, by W. S. Russell. 100 fine pullets at St. Constant and St. Constant was accord from 90Cto 94 potats. I guarantee to



50 COCKERELS—Langebans and S. C. B ties Of cular free. CONTINENTAL POUL-TRY: FARM. Bellevile, Illinois.

BARRED PLYMOUTH ROCKS FOR SALE
(Conger strain) unscored ckis. \$1.00
each; females 75c and \$1.00 each. For
ecored birds, and Mammoth Bronse

MRS. U. E. THURMOND. Louisiana. M.

WHITE POULTRY, Light Brabmas, W Holland Turkeys, imperial Pokin Ducks arm Falsed and warranted to please. SILVER LUME POULTRY FARM, Brookfield, Mo., Box 168, M. BEWAXT, FOOTIEST.

PRAIRIE HOME POULTRY YARDS.

DARRED P. HOCKS exclusively. A nice lot D of cockerels \$1.50 each. 3 S. Wyandeste heas and 1 eees, \$4, to close them out. 1 D. Brahma cock \$1. No more collies until spring. GBC. OLOUGH. Carrolites, Illinois.

Removal Sale! Special Prices! Mammoth Bronze Turkeys, Toulouse Geese, Pekin Ducks, Buff Coohins, Buff and White Ban-tams, White Guiness and White Muscovy Ducks A. C. TOMB, Eureks, Ill.

Partridge Wyandottes.

Cornish Indians, Barred P. Rooks, Indian Runner Pucks, Duroo-Jersey Swiss. Stock of the
best. BOSERT BLACK HAYMOND, No. 400 Chicks and 100 Turkeys for Sale.

O. I. Games, L. L. Wyandottes, B. P. Books, S. C. B. Loghorns, Buff Cookins, White Laugshan, White Indian Games, B. B. Games, Coulon S. Bantams, White Cuiness and M. S. Christophys. J. E. STOPHE, BOY, Hinton, Mo.

TRY Allen's Lung Balsam

THAT
COUGH
That as a expectorant is has no equal. Mothers will find it a pleasant and safe remedy to give their children for whooping cough and

All Druggists Sell It. Ask for ALLEN'S LUNG BALSAM and be sure on get-it. Price, 25c, 50c, and \$1.00 a bottle.

POLAND-CHINAS.



VIVION & ALEXANDER,
PULTON, MO.
Breeders of the best strains of Poland-China
hogs. Registered Jersey oattle and Plymouth
accidental. Young stock for saie at all times.

Kern Brothers, SHELDINA, MO...
POLAND-CHINA HOGS and Fancy Poultry.
Herd headed by "Golden Rais 31814." Some

eaded by "Golden Bule 31514." Some stock for sale. Also 100 Pekin Ducks reasunable. Write us.

Choice ones, finely bred with good style at very low prices to make room for younger stock. Address L. G. JONES, Towanda, McLean Co., Illinois.

POLAND-CHINA BOARS

OAKWOODS!! POLAND-CHINAS and BERKSHIRES POR SALE! Barly aprils boar and choice fall pigs. 60 sows and gifts bred to four boars. Els 50 985. B. P. Rooks. el 10 90 sech. Alistok

WHITE HOGS.

O. I. C. Pigs.

MPROVED Chester White Swine, rich izworld Fair blood. Illustrated catalogue free. B. W. BROWN, Shelby, Folk Co., Ret

DUROC-JERSEYS.

Rose Hill Herd of Duroc-Jersey Hogs.

Duroc-Jerseys Of the best strains. Everything guaranteed as represented. S. G. BIOHARDS, Stargeon, Mo

Buroc Jersey and Berkshire Hogs!

\$10 BERKSHIRES \$10 nice lot of pigs by Artful Star Mo. two March boar pigs by Ideal King best of pigs and the best of breed-nd see or write me. A. I. MOSS, Mt. Vernon, Illinois.

HOG TAMER!

STEAM FEED COOKER J. R. PURINTON & CO.,



We know our Stock Feed Cooker is far the best for the practical farmers; hence, we want to send you, free, a valuable little treatise on cookers and what they should be. We claim the

Heesen Feed Cooker

is superior to all others in economy of cost, fuel and repairs; durability, convenience, simplicity, quickness of heating and quality of feed. Convenience, simple of the convenience of the convenience satisfaction and absolute frill measure. Seven sizes—15 to 90 galo. Sold only direct from factory to farmer.

HEESEN BROS. & CO., ap riigh St., Tecumseh, Mich.

e.

...





Offers splendid insucements to homescakers. The Frisco Line reaches the most important localities in the territory, and takes you through to Okinhoma City without change of cars, it is the shortest and most desirable routs. Write for descriptive literature to Bryan Snyder, G. P. A., St. Louis. Me.

The Pig Pen.

"I AM NO. 2" 49037.

Farrowed April 8, 1888-Owned

the herd boar of Mr. Edw. Burroughs, El Paso, III. who is one of our most progressive young farmers and breeders of thoroughbred Poland-Chinas and fine poultry in the state. We invite attention to the advertisement of Mr. Burroughs' public sale at his farm near town no sale at his farm near town on Wednesday, Jan. 17, 1900.
"I Am No. 2" 40007, is of great conformity, and stands strictly on his own merits, as to his own formation; also his ability to produce pigs of the highest type and quality. He is a full heathlic sale at his farm near town and quality. He is a full broth-er to Chief Perfection 2d, the er to Chief Perfection 2d, the sweepstakes boar of '97, and a litter brother to I Am Perfec-tion, the sweepstakes boar of '99 at Illinois state fair. His pigs are new selling at excellent prices; B. F. Gossick sold one litter of five by him at 4% litter of five by him at 4% months of age for 230. He is a show hog all through; good judges pronounce him one of the foremost and most impressive sires of to-day. Attend the sale and see the hog himself and the grand offering that Mr. Burroughs presents to the public at his first public sale. Such an offering would be a credit to the oldest breeders in the country.



And the state of t

The Shepherd.



Great Public Sale of Prize Winning

At Fair Grounds, Springfield, Illinois,

Thursday, January 11th, 1900.

Consignments from Show Herds of
J. S. RISK, W. N. WINN & SON,
J. S. RISK consigns CHIEF I KNOW the prise winning sire and
grand sire of prise winners, a hog whose fame is National as the greatest sire of prise winners—also as spring boar, a full brother to PERFECT
I KNOW. Black Beauty F, the dam of Perfect I Know, bred to Chief
I Know 2d prise, 2-year-old sow at Omaha '98, and 8 others, all bred
to C. I. K., the very cream of his herd.
W. N. Winn & Son will offer the noted U. S. Chief sow, May
Queen, dam of sweepstakes sow at Illinois State Fair 1899; Louise
Corwin, dam of Perfect Wonder, that was 3d in yearling class at same
fair and sold for \$167.0c, and other great sows by such boars as Black
Chief, Chief Perfection 2d, and Chief Tecumseb 2d, all bred to the
great prize winner and sire of prize winners, PERFECT I KNOW; also
4 summer pigs sired by P. I. K.
F. M. Lail puts in L's Perfection, the best boar ever sired by
Chief Perfection 2d, Ina's Chief by Chief Tecumseb 2d, and out of
Ina Wilkes, 3 full sisters to Ina's Chief, Ina Wilkes, dam of the \$2,025
litter, bred to L's Perfection, Lady You Know by Chief I Know,
weepstaker sow of '97, bred to L's Perfection, and other great sows.
The great boar "HAWKEYE CHIEF" goes in the sale.
UNBROKEN LINE OF PRIZE WINNERS.—GREAT MONEY MAKERS.

UNBROKEN LINE OF PRIZE WINNERS---GREAT MONEY MAKERS.

Catalogs will give terms of sale and full particulars and serve as an encyclopedia of the Poland-China breed. No catalogs mailed out except on application. D. A. Watts will bandle bids from "Rural World" readers.

Auctioneers, H. O. CORRELL, J. W. SPARKS.

FRANK D. WINN, Mgr., 1500 Grand Ave., Kansas City, Mo +#+#+#+#+#+#+#+#+#+#+#+#+#+#+#+#+#+#+

Vermont Poland-China Co., Vermont, Illinois.







The Markets Stock Yards.

KWHEAT FLOUR-Eastern jobbing at \$6

Anominally 8-33.

Mass SEEDEs—Offerings light at steady prices.

\$3.56 for poor 87.56 for choice; red top.

25 in chaff and \$6 for choice to \$7 for
German millet; if for prime; Hungarian;

millet 756mp; timothy \$502.35.

XSEED—Pirm at \$1.45 bid.

TOR BEANS—Nominal at \$1.12 per bu. for

A RECCH OF		
The following table shows	the range	of prices
in futures and cash grain; Closed	Ranged	Closed
Saturday,	To-day.	To-day.
Wheat-Dec 00 m	71% (972%	
May		7216 a 6916 b
July	6914 (9691/2	08/2 13
Corn—Dec30% a		20 b
May	11% 67% 673216	32 a
Oats-Dec231/2 n		********
Mm v 24% h		251/6 b
Cash wheat, corn and oats	Saturday.	To-day.
Wheat-No. 2 red.71 @	7116@72	72 @
No. 3 red68 @71	69 607016	69 6971
No 4 winter 64 6009	62 @67	62 @67
No. 2 hard	641/20266	65 6767 62 6764
	63 @64 3114@	811/600
Corn-No. 237 4371/2 No. 3361/2@37	20% 60	31 003114
No. 2 white36\2@37	3146	3114@31%
	30% @	31 @
Oats-No. 224 @24 /2	24	28% @
No. 324 @	24% @	27 1/2 6028
No. 2 Northern 241/20 No. 2 white 25 1/20 26	24% @26	30 @301/2
No. 3 white25 @25%	25 602514	29 @30
No. 4 white2414@26	241/2/0/243/4	28 @ 2854

THE COTTON MARKETS.

ton Markets Generally Strong, but

Quiet-Locally There Was

No Change.

New York wire says of the situation abroad:

ppool market is gradually developing in

great the same of the strong of the second of the seco

Les coulses a condense of the subject of the subject "Read of the subjec

shipped 55 cases.



beads and feet on—Turkeys, choice light, \$45c; choice house ya \$6c; rough and this effect, choice holders, \$66c; the choice heavy \$6c; rough and this effect, choice heavy \$6c; rough and country of the content \$6c; rough and rough \$66c; rough, thin, rough and scalared with heads and feet off: Turkeys—Choice light \$6c; choice heavy \$6c; rough and rough \$66c; rough, thin, rough and scalared scale weet only; \$10ail, select unchannels and the content \$6c; rough and reflect \$1.5c; the content \$6c; rough and reflect \$1.5c; the country of the practice of cooking feed for live stock, and range \$1.5c; the country of the practice of cooking feed for live stock, and reflect \$1.5c; the country of the practice of cooking feed for live stock, and reflect \$1.5c; the country of the practice of cooking feed for live stock, and reflect \$1.5c; the country of the practice of cooking feed for live stock, and reflect \$1.5c; the country of the practice of cooking feed for live stock, and reflect \$1.5c; the country of the practice of cooking feed for live stock, and reflect \$1.5c; the country of the practice of cooking feed for live stock, and the property \$6c\$. Derived \$1.5c; the country of the practice of cooking and the practice \$1.5c; the country of the practice of cooking of feed material and the property of the practice of cooking of feed material and \$6c; the cooking of feed and the property of the practice of cooking food the practice of cooking

KANSAS FARMERS MEET NEXT | feed, except what Buffalo grass they

KANSAS FARMERS MEET NEXT WEEK.

The twenty-ninth annual meeting of the Kansas board of agriculture will be held in Representative Hall, Topeka, from Jan. 10 to 13, inclusive. The board's annual meeting is always productive of great good in encouraging the use of more progressive methods by the farmers and stockmen of the state, and is considered altogether the most important and helpful of the year devoted to agricultural interests. All Kansas railroads have granted an open rate to Topeka of one fare and one-third for the round trip. Tickets will



on sale January 6 to 13 inclusive, and including Monday, January 15.

uation and its Future," by Col. F. J. nerry, the extensive and widely-known horse salesman of Chicago, who, by reason of his long experience in the business and his present intimate relation to it, should have a clear understanding of the conditions pertaining so this impertant branch of live stock husbandry. Dr. D. E. Salmon, chief of the U. S. Bureau of Animal Industry, Washington, D. C., has promised to be present and treat "Some Live Stock Problems From an Official Point of View," which can not fall to be valuable, coming as it does from one of the highest authority.

Col. Richard J. Hinton, of Brooklyn, N. Y., a gentleman of wide observation of the sight was a grand one to say the

as that was quicker than putting them in the chute. the chute.

Sheep are doing fine on the range yet. The bulk of the sheep in this county is located on the ranch of a Mr. Harter, five miles west of my place. I will visit this ranch soon and will tell your readers what I see.

Woods Co., Okla. Ter.

writing.

MRS. DELLA MAXWELL, Fayette, Mo., places an advertisement of her fine poultry in this issue of the RURAL WORLD. She is a very successful and, reliable breeder, as is greatly in evidence by the winnings she has made at the various fairs and poultry shows. At the late state show at Sedalia, where competition was very strong, her poultry took the following premiums: First and second on cockerel, first and fifth on pullet, first on breeding pen and sweepstakes over all American classes. On Mammoth Bronze turkeys she won second on yearling. She has for sale some extra good cockerels and Mammoth Bronze turkeys at very reasonable prices. Write her at once and rest assured of fair, honorable treatment.

IF you look at a dozen com-

or "pearl glass," you will see

the differences-all but one-

they break from heat; Mac-

beth's don't; you can't see that. Common glass is misty,

milky, dusty; you can't see through it; Macbeth's is clear.

Tough, clear glass is worth fine work; and a perfect chimney of fine tough

glass is worth a hundred such as you hear pop, clash on the least provocation. Our "Index" describes all lamps and their proper chimneys. With it you can always order the right size and shape of chimney for any lamp. We mail it FREE to any one who writes for it.

Address Macrery, Pittaburgh, Pa.

THE THE ONLY POSTTYPE CURE for Alcohol-ism and Recretic from Using. Correspondence solicited and con-fidential. Address ure Dr. J. E. Blaine, Mgr & Physician, 2808 Locust St., St. Louis, Mo.

DOULTRY PARMER, Marshall, Mo., 30 pages One year trial 25c. Lice killer 75c gal.

ur forgos a combined FREE

Largest manufacturers of Steel Wagon Wheels and Handy Truck Wagons in America. Guaranteed su-perior to any other make

\$3 TO \$10 PER DAY

BED-WETTING CORED. Generie FREE.

what is going on in the

great world about you and all the news from the attermost points of

REPUBLIC

OF ST. LOUIS

pay you a hundredfold.

A Better

Newspaper

the earth.

SEND ONE DOLLAR

and get TWICE-A-WEEK

mon lamp-chimneys, and then at Macbeth's "pearl top"

IN SOUTHWEST KANSAS. Editor RURAL WORLD: I had a





A Two-Year-Old Bull, Weight 1,250 Pounds, Inoculated During the Winter of 1893, at Missouri Experiment Station.

lege." Another specially attractive feat-ure is the illustrated lecture by Prof. 8. Is shown herewith, is entirely new, and is J. Hunter of the State University on the subject "Alfalfa Cuiture and Insect Life." It is made in two styles; the sweep subject "Alfalfa Cuiture and Insect Life." President Carl Swensson of the Bethany College at Lindsborg, has accepted an invitation to be present and will make a address on "The Farmer Boy—The Prince of the Twentieth Century." The topics and speakers mentioned are but a part of the feast of "good things" to be set before the Kansas agriculturists and their guests, and all indications promise one o the most prosperous and profitable se-

AN OKLAHOMA LETTER.

RURAL WORLD find reports from your ontributors about the condition of wheat contributors about the condition of wheat in the several states. As far as I can un-derstand the whole of "The Strip" has the finest wheat prospects known in its his-tory. This (Woods) county has apparent-ly a sure thing as far as the conditions at the present time are concerned. The early wheat looks a trifle better than the late, but the late is good enough for any one who is not a "swine." Several o my neighbors are letting their stock is on the early wheat, and as soon as I ge ome feed off a part of my field I sha turn 50 head of cattle in on it. This whea was drilled the last week in September The best crop of wheat ever raised on my place was pastured by 30 head of cattle from February 10 to April 1, there being 60 acres of it. The stock had no other





Finely Upholstered Couch \$4.50 We carry a large stock of upholstered furniture, and offer special bar-gains in odd pasces or full parior sulls. Send for true sample of upholster ARTISTIC IRON BED. \$2.50

We have a most complete time of from heds, bought before the great advance in the price of iron, and which we can sell NOW at a price much below what you will have to pay lairer on. Our heads are seen according mode, the pillare being much heavier thus you smeally find on the pillare being much heavier thus you smeally find on the pillare being much heavier thus you smeally find on the pillare price. I first of the pillare that the pillare price is a price of the pillare price. The pillare price is a first firs

Bond for Circulars giving full particulars.

RAINEY MILLER'S Poland-China Brood Sow Sale

At Taylorville, Illinois, Tuesday, January 9th, 1900

50----Sows of Popular Families----50

Will go into the sale ring where buyers will take them at their own prices. This is an offering worthy of the occasion. It will contain, 8 by Chief Perfection 2d, 8 by Chief Tecumseh 2d, 2 by Ideal Sunshine. Others by Cole Me Over, Union Chief, Zenith Chief, Duffield, L'a Tecumseh, Joe Coler, Missouri's Black Chief. Bred to Missouri's Black Chief 2d, by the Illinois State Rair winner, Royal Sunshine, Priceless Tecumseh, and King Trenton, the hog that won sweep-stakes at the State fairs of 1898.

Special Attraction.

An extra individual and State Fair winner, and full sister to sweep-stakes sow at Illinois State Fair 1898, sired by Klever's Ambition and bred to King Trenton the bold Sweepstaker of 1898. This sow is a fine individual.

Sale IN TOWN during the Illinois State Swine Breeders' meeting. Come and inspect the offering, it will not disappoint you, for the best lot I ever offered you. Send bids to my auctioneers, or D. A. Watts in my care, after Jan. 1st, Taylorville, Ills. This sale will be conducted on business principles. Catalog ready. Send for it.

Auctioneers, Col. B. P. McCracken, RAINEY MILLER, Champaign, Ills.

Taylorville—On Wabash and B. & O. Southwestern R. R., 28 miles S. E. Springfield—Mention Rural World.

L. G. JONES' Brood Sow Sale,

AT TOWANDA, ILLINOIS, TUESDAY, JANUARY 16, 1900.

50 Poland - Chinas,

Being sired by the Great Representatives of the Breed, viz:

Chief Perfection 2d, Chief Tecumseh 2d, Tecumseh Chip, Weich's Black U. S, Robert Price,

Black Chief, Chief I Am, Moorlsh Lad, King Tecumseh, Look Him Over.

Bargains for Breeders and Farmers, Honest Worth Here.

Also among them are ten extra fine young fall sows by Robert Price, by One Price. They are queens, tracing to old Tom Corwin 2d. They are good ones and should be looked after sale day. Bred to Look Him Over by Look Me Over, Jr., by Look Me Over. Hawkeye Price by Hawkeye Chief. Chief Tecumseh, Jr., by Chief Tecumseh 2d. Sows are good individuals and bred right. A few sows by old Tecumseh Chip 10211 in the sale. This is a grand opportunity for breeders to get a good sow from Chip. This grand breeding hog died on my farm. The catalog is descriptive, illustrative and instructive. Send for it, it imparts the information asked for and it is a cyclopedia of facts concerning the offering and the sale. Send bids to auctioneers in my care. Parties can attend my sale then reach Ed Burroughs' sale next morning, come and take in both sales. Sale takes place on farm 2% miles out of town. Drop me a postal for my catalog. Send bids to

COL. H. O. CORRELL, COL. D. P. McCRACKEN, Auctioneers.

L. G. Jones,

Towanda, Illinois. Towards is 8 miles from Bloomington, on C. & A. R. R.

35 POLAND-CHINAS

PUBLIC AUCTION At My Farm, 31/2 Miles Northwest of

Chestnut, Logan County, Ills., ... ON FRIDAY, JANUARY 12th, 1900 ...

Consisting of 12 aged tested brood sows, 12 choice spring gilts and 8 fall yearling sows. They are sired by C's Tecumseh, Black U. S. 2d, Young McKinley, Chief Wilkes by Chief Tecumseh 2d, Mohawk Chief by Chief Tecumseh 3d. They are bred to Perfection I Am by Chief Perfection 2d, and Chief Wilkes by Chief Tecumseh 2d. They are a choice lot of sows. Send blds to D. A. Watts or Col. H. O. Correll. Catalogs ready now.

Chas. Gulso, Chestnut, Ills. 0404040404040404040

EDW. BURROUGHS' FIRST ANNUAL SALE OF

Poland-China Hogs

BROOD SOW SALE

ATEL PASO, ILLS., WEDNESDAY, JANUARY 17, 1900. Poland-China Favorites. The most popular size with the mellow finish combined

Sixty head of Royal Poland-China Sows, sired by Chief Tecumseh 2d. Chief Perfection 2d. Look Me Over, Perfect I know, Ideal Sanshine, Latest Skyle, Slack C. S., Black Chief's Rival, Hadley's Model, 2d Hidestrether by Hidestrebhoer, Lookous, Ideal Chief and Cibers. Bred to I Am No. 2.

SPECIAL ATTRACTION head AND EAR and is the making of a TOPFY FELLOW, the boar Teoumesh Model a grandson of Chief Teoumesh 3d out of a Wilkes bred sov. a good breeder, He 18 IDEAL CHIEF a grandson of Heyl's Black U.S., a line bered black U.S. as we have a grandson of Heyl's Black U.S. as in a bered black U.S. as we not you see his get you will want HIM. I invite you to come and laspect my offering and I am sure you will dut a constitute that will please your sys. SALE is on the square, you say what my stock law orth, YOUR PRICE IS MY PRICE.

Col. D. P. McCracken, Col. H. O. Correll, Auctioneers. on Illinois Central R. R. and T. P. W. R. R. Come and enjoy a day with ME. Parties can reach my sale from L. G. Johnes's sext Me. Parties can reach EDW. BURROUGHS, | Woodford County, El Paso, Illinois.



O YOU WANT A FARM